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ABSTRACT

This collection of conference papers (presented at the 1975 Texas Conference on Infancy sponsored by the Association for Childhood Education International) is directed primarily to caretakers, potential caretakers, and parents of young children. Articles included are: (1) Some Observations on Group Care of Infants; (2) What a State Can Do--For Infants; (3) How to Establish and Operate an Infant-Toddler Development Project; (4) Day Care: Planning for Learning in Infancy; (5) A Day in the Kramer Baby House; (6) A General Model of Programs for Handicapped Infants and their Families; (7) At Risk; and (8) Selected Information on Practical Resources for Infancy and Infancy Programs: An Abstract Bibliography. (MS)

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Developing Programs for Infants & Toddlers

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Contents

Introduction — *Joe L. Frost*, Associate Professor, Department of Curriculum and Instruction, The University of Texas at Austin 1

Some Observations on the Group Care of Infants — *Dorothy W. Gross*, Child Development Faculty; Director, Program in Infancy Education, Bank Street College of Education, New York, New York 3

What a State Can Do — For Infants — *Jeannette Watson*, Director, Early Childhood Development Division, Texas Department of Community Affairs, Austin 7

How To Establish and Operate an Infant-Toddler Development Project — *Michael F. Romaine*, Director, Zale Foundation, Dallas, Texas; *Charlotte Knight Pfeifer*, Director, Infant Stimulation Project, Human Development Center, Rock Hill, South Carolina; and *Elizabeth Jane Rowe*, Child Development Specialist, Texas Department of Public Welfare, Dallas, Texas 15

Day Care: Planning for Learning in Infancy — *Betty S. Wagner*, Assistant Professor, Home and Family Life Department, Texas Tech University, Lubbock 23

A Day at the Kramer Baby House — *Bettye M. Caldwell*, Professor of Education, University of Arkansas at Little Rock; and *Joan Rorex*, Coordinator, Day Care, and Infant Teacher, Kramer School, Center for Early Development and Education, University of Arkansas at Little Rock 34

A General Model of Programs for Handicapped Infants and Their Families — *Ernest A. Gotts*, Associate Professor, Special Education, School of Human Development, The University of Texas at Dallas 52

At Risk! — *Joe L. Frost* 61

Selected Information on Practical Resources for Infancy and Infancy Programs: An Abstract Bibliography — *Sue C. Wortham*, Emergency School Aid Act (ESAA) Director, Lockhart Independent School District, Lockhart, Texas 67

Introduction

In June 1975 the Texas Conference on Infancy, sponsored by the Association for Childhood Education International (ACEI) and five Texas agencies, was held on the University of Texas campus in Austin. Approximately 1,000 people attended the conference (763 official registrants), representing twenty states, three countries and a broad variety of professional and nonprofessional backgrounds. Speakers and resource people contributing to the conference have graciously made manuscripts available, in keeping with a major goal of the planning committee and ACEI to extend the influence of the proceedings as widely as possible through publications.

The first volume of conference papers, *Understanding and Nurturing Infant Development*, was introduced to the public in the spring of 1976, at the Annual ACEI Study Conference in Salt Lake City. This publication had a relatively strong technical or research orientation. Focus of the present publication is on practical applications of knowledge about infants and parenting in both center and home contexts. All except one of the contributors (Dorothy Gross) were participants in the Texas conference.

Since the convening of the Texas Conference on Infancy and the publication of *Understanding and Nurturing Infant Development*, the leadership of our country has passed to a new generation. Once again professionals and laymen alike have renewed hopes and dreams for a stronger emphasis upon the health and welfare of future citizens. The time is right—for one of our most cherished social institutions, the family, is in a rapid rate of erosion from divorce, parental absence, and breakdowns in moral idealism. America's youngest citizens—infants—are first to endure the consequences of family disruption, and their caretakers (parents and other nurturing adults) are in the position of greatest influence. This volume is addressed primarily to caretakers and potential caretakers. The content is practical and can be implemented by both parents and professionals in their respective caregiving contexts: it offers guidelines for the development of child care programs; and, coupled with the earlier volume, it provides a rationale for public policy and intervention.

In the lead paper *Dorothy Gross* examines and places in perspective one of the most crucial issues in group care of infants—whether it is helpful or harmful. The conclusion is to the point: there are good programs and there are bad programs. Healthful care for children cannot wait until they are 3 or 4 or 5 years old. Group care is *not* designed to substitute for or to replace the family but rather to extend quality care to those children who for any reason do not presently have access to a rich, healthful family setting. It is designed to enrich family life; the good program for infants is by definition a program that involves parents. We might therefore well consider it careless and utopian to declare, as some critics do, that bad home environments are better for children than good group care centers. In the worst family environments, children do not survive.

A second broad issue is explored by *Jeannette Watson*: What can a state do for infants? Writing from an exceptionally rich background of experience, she focuses upon the promise of prevention in resolving many serious problems of infants. States can employ both primary prevention—immunization, maternal care, and parenthood programs—and secondary prevention —PKU screening, medical programs and educational programs. Strengthening the family must

be a central focus in all state programs, and individual communities must be assisted yet encouraged to make decisions in caring for their own children.

The remaining selections are designed for those who wish to interpret into practice the rich content from the first two selections and the research from the earlier companion volume. A variety of programs for infants and parents are described. *Michael Romaine, Charlotte Knight* and *Elizabeth Rowe* have developed several programs. Their most recent, a center in Dallas, Texas, serves as a model for demonstration of quality infant care, a training site for paraprofessionals, and a setting for parent education. In their paper, these professionals assist the reader in understanding the selection and use of equipment and supplies, staff training, relations with parents, health and safety, and organization of daily activities.

Betty Wagner builds upon these bases to assist in developing techniques for planning and managing the environment. She presents illustrative learning activities for various developmental levels of infants. As in many programs for infants, the Piagetian influence is quite strong.

The third program description by *Bettye Caldwell* and *Joan Rorex* focuses upon the well-known Kramer School in Little Rock, Arkansas. This unique school offers both early childhood/elementary education and day care programs in an integrated fashion. The "Baby House," a portable classroom adjacent to the main school building, is the site for an exciting descriptive "tour" of a day with the infants. The authors complement Wagner's sampling of learning activities by presenting a schematic representation of the total environment of the infant program.

The final two papers complete the established context by focusing upon intervention programs for the handicapped and potentially handicapped. *Ernest Gotts* reviews the components of a model program for handicapped children and their families. *Joe Frost* presents an overview of research and program implications gleaned from the deliberations of the National Conference on Early Intervention with High Risk Infants and Young Children, held at the University of North Carolina in Chapel Hill, May 5–8, 1974.

This second volume, like the first, is concluded with an annotated bibliography by *Sue Wortham*. The subject of the first was recent research. This one concentrates on practical program-oriented materials.

In the initial volume I expressed special thanks to the sponsors of the Texas Conference on Infancy. Now I wish to extend appreciation to my good friends and colleagues who worked faithfully to make the conference a great success: Karen Bordelon, Lurline Brady, Gail Bunce, Caroline Carroll, Addie Crayton, Jean English, Theresa Escobedo, Betty Frost, Ray Graham, Mike Henninger, Kathryn Hensley, Carmela Hernandez, Steve Jackson, Barry Klein, Ronnie LaCoste, Lorene Laird, Dave Levad, Bobbie Matthews, Dorine McFarlin, John McNutt, Margaret Miller, Jacqueline Myers, Jean Nelson, Mauro Reyna, Bernice Smith, Nancy Smith, Ann Steinhauser, Jill Thrift, Carole Urzua, Libby Vernon, Oscar Villarreal, Jeannette Watson, Laura Williams, Sue Wortham, Gloria Zamora.

And, finally, my respect and admiration to Monroe Cohen and Alberta Meyer for their skillful, dedicated service on behalf of everybody's children.

Joe L. Frost

ACEI Vice-President Representing Infancy (1974–1977)
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Some Observations on the Group Care of Infants

One of the most provocative questions you can ask early childhood people these days is, "What do you think of group care for infants?" The issue is so emotionally loaded that only rarely does it bring forth a considered reply.

At one extreme are those who feel that group care, by its nature, interferes with the development of attachment and does not provide sufficient stimulation for cognitive growth; in this view, any discussion of forms and arrangements is superfluous and dangerous. At the other end are those who feel that the nuclear family is the seedbed of neurosis and that only group care will provide the proper psycho-social setting for healthy development. Political orientation inevitably colors reaction; group care for infants is seen as the horrendous opening wedge of socialism or as the first step on the path to a properly egalitarian society. Other issues come in, such as the need for working women to have day care for their children or the right of all women for relief from child care. Underlying all these views is an intense concern for the welfare of babies and mothers that is rooted in our own earliest experiences as creatures dependent upon others for physical and emotional sustenance.

Two years ago I had my first experience visiting an infant center. It was a jolt: infants-in-groups violated every cultural, psychological and professional bias I had. I was almost ready to condemn the whole thing. But the number of centers was increasing and research was proliferating. So I visited more centers and I read a great deal about infant development, mother/infant interaction and group care. And, as I learned, my views became less judgmental and more differentiated. I would like to share them with you.

A Nexus of Needs

Group care for infants is not just a psychological concern. It is a psychological issue set in a social context. The needs of babies, the needs of women, the needs of families intersect and transact. How babies grow is as much a function of their mothers' feelings and ambitions and of their families' cultural identity and economic status as it is of their own organisms, temperaments and early experiences. Accordingly, the notion that babies in poor neighborhoods need to be rescued from their inadequate or harmful

mothers is as ill-advised as the assumption that middle-class families are necessarily supportive. It is the *quality* of a baby's experience that is significant—his personal transactions with key individuals and his unique responses to the stimuli in his environment. What, then, does he need for optimal development?

He needs to be physically healthy, with appropriate nutrition, access to medical care, adequate and peaceful sleep, freedom from stress. He needs a close, supportive relationship with a small, consistent number of people, a few of whom are the primary givers of care—a relationship that supports the development of strong human attachment and the sense that the world is a reliable place. He needs what psychologists call "contingent response"; i.e., someone who will respond to the signals he sends out for food, physical care, play. Not the same as general sensory stimulation, which the baby also needs, contingent response is a more differentiated tuning in to the baby's unique cues. It sets the stage for the development of self-confidence and of an increasingly varied repertoire of communication skills. He needs things to handle and mouth and smell and examine. As he grows into toddlerhood, he needs space in which to explore and a home base to which to return. He needs a sense of being part of a supportive matrix of care and experience—responsive and responsible people to relate to, interesting things to examine, a safe environment in which to grow.

Can he receive all this in a group day care center? I'm not sure; it seems clear that centers vary greatly in the extent to which they meet the needs of babies. As I traveled around looking at centers, it seemed to me certain factors distinguished the better ones from the poorer.

Characteristics of Poor Programs

The poor programs tended to be characterized by splits of different kinds. *First*, age-groupings were rigidly maintained—6- to 12-month-olds separate from 12- to 18-month-olds, these separate from 18- to 24-monthers. This split had two effects. For one, it interfered with the natural learnings possible for a baby exposed to older children. For another, the heavy work load for the caregivers was unbroken by the variety possible when ages are mixed; as tedium increased, responsiveness to babies decreased.

Second, the needs of the program tended to supersede the needs of the children. In the one program, for example, mothers were discouraged from picking up their children early because the curriculum and the staff hours were planned for a full day. In research-based programs, it was common for research variables to take precedence over daily needs. In one that was studying adult-child ratio, the research design called for comparison of two patterns, 1 to 5 and 5 to 25. No consideration was given to the effects on a baby of life in a group of 25, regardless of number of caregivers. Some research programs tended to overstructure the child's day and environment and to transmit a sense of unnaturalness, as if the child were in an antiseptic box, removed from the ebb and flow of everyday life. The point is that the "program" or the "research" was perceived as separate from the life of the children.

Third, cognitive development tended to be seen as separate from—and often more important than—social or emotional development. These were characterized by special language training (as if the language doesn't grow out of relationship) or formal sessions of sensory stimulation (ignoring the stimulation inherent in daily experience). The national trend toward the deification of formal academic skills was seen here in its earliest form. One dramatic example was a program in which a small group of 18-month-olds, cared for by a shifting group of caregivers, were showing shallow, superficial "attachments" to any stranger, unprovoked biting, poor eating patterns and

retarded language. The professional staff's response was to slap the hands of the biters, to test the children for language and to buy a large number of "educational" toys!

Fourth, parent needs were too often seen as separate from, even antithetical to, children's needs. I do not mean to suggest that adults do not have legitimate needs for rest, recreation and stimulation different from their babies' needs but rather to note that poorer programs focused on one or the other. Some programs designed for children in poverty areas were patronizingly prescriptive to the parents, taking into insufficient account the reality of the child's life at home.

Fifth, poorer programs tended to be characterized by insufficient individualization of care. No one caregiver can be properly responsive to four or five babies all of the same age. Inadequate funding is part of the cause. But the condition seemed to stem also from widespread ignorance of the facts and principles of child development. This ignorance was particularly notable in the arrangements made for toddlers—insufficient space, discouragement of the need to explore, casualness about the toddlers' strong attachments to key adults.

Characteristics of Good Programs

And what of the good programs—those in which children seemed to be thriving and the parents were having their own needs met?

First, and most notable, these programs were multiple faceted. Infants and toddlers were viewed as whole beings, not small bundles of IQ or even DQ (Development Quotient) points. Concern for appropriate sensory-motor stimulation was set in the context of babies' needs for emotional security, for sound nutrition, for expanding contacts with other people. Accordingly, these programs tended to be flexible. Time schedules, as much as possible, were adapted to the unique personality and needs of each child, even to the extent of feeding and bedding as needed. These programs tended to consider the primary factor in healthy development a warm, supportive relationship with a mothering (in two cases, a fathering) person; the *relationship* integrated physical, emotional and cognitive factors, not a specific curriculum.

Second, these good programs were most often characterized by a partnership between parents and professionals. In the few I saw, the professionals provided a broad objectivity and technical knowledge and skill while the parents were the sources of personal knowledge of the children and a sense of partisanship on their behalf. Where the professionals—nurses, early childhood specialists, occasionally social workers or psychologists—were able to recognize the importance of the parents' contributions, I had the greatest sense that learning and development would continue.

Third, good programs had made provision for staff development. They did not necessarily always choose to do so in the form of conventional meetings, although these were held too. For paraprofessionals, the most effective method often seemed to be on-the-spot teaching by a respected professional, with the child's behavior-in-the-given-situation being the focus. Also useful were case-conferences on each of the children in a program and exchanges of experiences between staffs of different programs. Whatever the technique, the effective centers seemed to consider themselves not only programs for children and parents but also minischools for the staff.

Fourth, effective programs were, surprisingly enough, neither overly child-centered nor overly center-centered. Most effective were programs in which a family model was the guiding blueprint. Infants and toddlers, because of their vulnerability and their special needs, were the center in the context of the flow of a caregiver's day and in the further context of families' values, needs and patterns of living. As a result, sometimes a caregiver's exhaustion or need for a change of pace or scene had to be given priority.

Even more, instead of always having adults adapt themselves to children, when possible and appropriate, children were fitted into adults' plans, as in a good home. Not only were the adults enlivened and restimulated in this way, with consequent benefits for the infants, but the children themselves were exposed to a more interesting life.

Some Implications

What meaning does all this have for an early childhood professional? For myself, a teacher-educator employed by a college with great concern for the quality of young children's experiences, the connection is clear.

Colleges and universities that have been offering professional education in early childhood should reassess their traditional commitments. A wider focus is needed. Professional education must reflect the multidimensional nature of infant and toddler development and the significance of families in the lives of babies. People are needed who understand infant and toddler development, the environments which support that development, family dynamics and cultural patterns—and who can work closely with paraprofessional and other workers. People are needed who can flexibly help families assess their needs for infant/toddler care and education and, when group care is appropriate, can make that care personalized for the baby and his family. Early childhood education does not begin at age 3.

What a State Can Do—for Infants

Infancy is an exciting subject. It strikes a refreshing chord for state officials who oversee programs to juvenile delinquents, drug addicts, the mentally retarded, the crippled, the disturbed and other handicapped people. Mention of "infancy" stirs a feeling of hope, a sense that depressing social problems can be prevented if we start dealing with them earlier.

Research has expanded our knowledge of infancy. We are learning, for example, about the effects of prenatal care and nutrition during pregnancy. We are studying such topics as mother-infant interaction, language acquisition and cognitive development during the first two years of life. From this research, we are beginning to consider how new knowledge of infancy can be used to impact social problems.

PROGRAMS OF PREVENTION

The key concept for states and others in human services is *prevention*. By removing handicapping conditions in infancy and early childhood, many social problems can be averted or at least reduced. By investing in early childhood programs, a state can curb its ever-burgeoning need for prisons, mental hospitals, special schools for the retarded and handicapped, and rehabilitation programs.

A number of federal and state programs for children have prevention as their goal. The nature of some programs is *primary* prevention—i.e., averting the handicap altogether; the nature of others is *secondary* prevention—i.e., identifying a handicap early and obtaining prompt treatment to limit its effect.

Examples of Primary Prevention

1. *Immunization.* Of the fifty-four states and territories, forty-seven require some immunization prior to enrolling in public schools. Forty-four require immunization against polio; forty-five against measles; forty-three against diphtheria; and thirty-eight against rubella. Two states, Vermont and Washington, have low option laws and regulations. Seven states and territories have no immunization requirements (Arizona, Guam, Idaho, Indiana, Iowa, Wyoming, and Puerto Rico). At no time is a child more vulnerable to these crippling and killing diseases than during infancy. The most effective statewide immunization and information programs are aimed at children 6 to 18 months old.

2. *Maternal and Child Health Programs.* States receive funds under Title V of the Social Security Act to support programs for antepartum and postpartum maternal care and for Well Child Conferences. The programs are designed to improve the health of pregnant mothers so they will give birth to healthy babies and to offer preventive health services to young children to keep them from becoming ill.

Aimed at a similar population is the U.S. Department of Agriculture's Women, Infants and Children (WIC) Program. It is a supplemental feeding program for pregnant and lactating women, infants and children, who have been found to be the most susceptible to effects of malnutrition.

3. *Parenthood Education.* To new parents having their first baby, ten states send a free newsletter series, *Pierre the Pelican*, from the time the child is born until the child is 6 years old. The states are Alabama, Kentucky, Louisiana, Massachusetts, Nebraska, North Dakota, Oklahoma, Rhode Island, Texas and Virginia. *Pierre* is a twenty-eight part mental health series, endorsed by the American Medical Association's Council on Mental Health; it informs parents how a baby grows and develops. In some states the program is supported through a voluntary organization, such as the state association for mental health. One small-scale survey in Texas revealed that 90 percent of first-time parents read every issue and use Pierre's information in rearing their children.

For teenagers who will likely become parents in a few years, the Office of Child Development and the Office of Education in the U.S. Department of Health, Education, and Welfare have started two parenthood education projects. In one, the Offices funded seven national voluntary youth-serving organizations, such as the Boy Scouts, Girl Scouts, and the Agricultural Extension Service (4-H Clubs), to develop parenting education programs for teenagers. As the same time, the "Exploring Childhood Curriculum" was made available to all fifty states. The Curriculum, a child development course for junior and senior high school students that includes working with young children, was funded by the Office of Child Development and the National Institute of Mental Health and sponsored by the Office of Education.

Educating teenagers about parenthood is the most basic of all preventive programs. It introduces them to responsibilities they will have as parents and instructs them in the experiences a child needs for sound development.

Examples of Secondary Prevention

Prevention programs of the *secondary* type generally use some form of screening:

1. *PKU Screening.* About forty-five states have laws requiring or recommending that newborn infants be screened for phenylketonuria (PKU). A hereditary defect, PKU can lead to mental retardation if a baby's diet is not adjusted in the first few days after birth. For every person spared from mental retardation by this program, a state saves $300,000 in lifetime instutional care. In Texas this savings amounts to $2.2 million a year.

2. *EPSDT Medical and Dental Progams.* Under Title XIX of the Social Security Act, states conduct early and periodic screening, diagnosis and treatment programs for low-income children. Children receive complete physical and dental examinations; if problems are found, the children may be referred for diagnosis and treatment by physicians and dentists, who are paid through Medicaid. Although children up to age 21 are eligible, the emphasis is on preschool children. The goal is to correct problems early so that children can develop normally and keep up with their peers in school.

3. *Head Start.* The federal government's most comprehensive early childhood pro-

gram, of course, is Head Start. Its purpose is to give educational and environmental enrichment to economically disadvantaged preschool children 3 to 6 years old. Educational activities are designed to help develop the full range of a child's ability; a child also may receive medical and dental care, nutrition and other services.

4. *Office of Child Development* Most of these programs—for infants, preschool children and prospective parents—are relatively new in the history of publicly funded human services in this country. The bulk of the federal early childhood programs began just twelve years ago. Some federal programs are channeled through state agencies, and some go directly to local agencies; the states, meanwhile, have a few of their own programs for young children and families. To complicate things further, not just one but several agencies provide children's services. Each agency addresses a specific category of need, such as education, mental retardation or health. This is true at both federal and state levels. With the maze of federal and state agencies and their programs for children, then, it is not hard to see why the Early Childhood Task Force of the Education Commission of the States urged in 1971 that states establish coordinating machinery for early childhood programs.

As of late 1976, seventeen states have established offices of early childhood development—Alaska, Arkansas, Arizona, Connecticut, Florida, Idaho, Iowa, Massachusetts, Mississippi, North Carolnia, Rhode Island, South Carolina, Tennessee, Texas, Vermont, Washington, and West Virginia. In addition three states have established similar offices in their state education departments—California, Louisiana and Utah. The directors of these offices, incidentally, have formed the National Association of State Directors of Child Development, an organization that can speak for the major concerns of the states in the area of early childhood.

Before a state office of early childhood development can begin coordinative efforts in federal and state programs and make any headway in meeting the needs of children and their families, it must know first what the needs of those children are. The Census Bureau, health agencies, social-service agencies and many others are collecting data on young children and families, but most states have no central depository for such information. An office of early childhood development can serve as the central depository and develop an information system to identify needs of children as well as existing resources.

CRITICAL NEEDS OF YOUNG CHILDREN

Three major needs of children under 6, common to all states, are: (1) parenthood education, (2) expanded child care and (3) improved health services.

Parenthood Education

Even though most parents today plan and look forward to having their first child, the skills necessary to care for the child often take them by surprise. In the past, young parents could look to their own parents for guidance in child rearing. That is not the case today because of the decline of the extended family. Senator Walter Mondale has said that, in 1900, 50 percent of the homes in Boston contained parents, their children and at least one other adult relative. Today the figure is about 4 percent.

Many young families are on the move. In the Texas Household Survey of Families with Children Under Six, 75 percent of the children under 18 months lived in families that had moved at least once in the last five years; 35 percent had moved three times or more. When families move, they break ties with family and friends who might offer guidance and support.

The trend toward nuclear families is but one indication of changing lifestyles. Another is the increasing number of single parents. It is well known that divorces are on the rise; at the same time, some couples are choosing not to marry. About one in twelve babies in America today is born to unwed parents. And, despite a trend toward delaying marriage, a sizable number of couples are marrying in their teens. Among young and immature parents, the risk of child abuse is very high. A view of these changing lifestyles, the need for information about family relationships and parenthood responsibilities is obvious.

Expanded Child Care

The Texas Household Survey of Families with Children Under Six showed that nearly 40 percent of Texas mothers with children under 6 are in the labor force. The vast majority are working because the family needs the money. In Texas, there are as many infants as there are 4-year-olds who have working mothers.

Families are having trouble finding quality infant care at costs they can afford. Child care facilities may be licensed to care for infants but, because they are expensive, they may offer only a limited number of infant spaces; and frequently those spaces are reserved for families with older children in the facility. Many families arrange with a grandmother or neighbor to care for an infant on a regular basis; but some families have no consistent care-arrangement, leaving the infant with a neighbor one day and a child-care center the next.

The need for infant care is critical among teenage parents. According to the National Center for Health Statistics, over 600,000 babies were born to teenage women in 1973; the number of births to girls under age 15 doubled between 1960 and 1973. Most of these mothers are in high school, but schools are not prepared to meet their needs. For example, of the 1,120 school districts in Texas, 165 provide some kind of program for pregnant students. Seventeen districts have comprehensive programs in a school or community facility; of these, only six provide an infant nursery. These nurseries care for the infant only for six weeks or until the end of the semester in which the child is born. So these high school girls have to find care for their infants, with parents or a commercial facility, if they want to finish school or obtain a job.

Improved Health Services

A child born in the United States has less chance of surviving the first year of life than in thirteen other industrialized nations of the world. Babies born to unmarried mothers are even more vulnerable. The infant mortality rate for illegitimate children nationwide is 75 percent higher than for legitimate children. Not all mothers receive medical attention during pregnancy; in Texas, for example, indications are that 76,000 Texas children under 6 today were born without any prenatal care.

Medical care is expensive and—in distressed economic times—can become a luxury for many families. Poor families cannot afford private medical care and often do not have access to public services because of transporation and other problems. Parents should be the managers of their children's health but many parents—rich and poor—do not know how to provide proper nutrition, how to prevent illnesses or how to care for one's teeth. A child's first visit to the dentist should come at age 2 or 3, but indications are that 95 out of 100 children never see a dentist before they reach school age.

HOW STATES CAN ACT

Improved health services, expanded child care and parenthood education are major children's needs common to all states. Each state, of course, will have its own immedi-

ate needs, such as those of handicapped children, Indian and migrant children, and abused children. The important point is that a state should know what the needs of its children are. Statistics collected regularly by various agencies, data from specially commissioned surveys, and views of private citizens are basic to a state's information system on conditions of young children. Equally important is information about public and private services to children and resources available for meeting needs.

When a state works vigorously in meeting young children's needs, inevitably it runs the risk of raising public fears about invasion into family life, increased dependence of families on the state and loss of cultural identity. These are valid public concerns because they tap at the foundation of our way of life. If we are to preserve it and, at the same time, assure all children a good start, then the state's role should hinge on family and community—to support family life and to assist communities in providing conditions conducive to the happy and healthy growth of children.

DECLARING PUBLIC POLICY

How does the state fulfill this role? First, I believe the state should declare a public policy on early childhood development. Such a policy would be the guiding spirit for all programs the state provided to young children and families. The main ingredients of that policy would be:

1. The family is the most important continuing factor in what a child will become.
2. In the absence of parents, or in the event a family needs supportive services, competent care should be provided.
3. Resources should be invested in ways that will prevent abnormalities and maladjustments in children.

"Family" is the key word in this public policy statement, because a happy stimulating family is the best environment into which a child can be born. Informed, caring parents are the best tool we have for preventing abnormalities and maladjustments in children.

With this policy as a matter of public record, the state should then try to help *communities* improve conditions for children. Why the community? Because the community is where children live—where their parents work, where children are born and get medical care, and where they will attend school and church. Too, the needs of children vary from community to community. Some communities, especially the rural ones, need more specialized medical care for infants; others need child care for infants while their mothers work. Parents and local officials know what their children need and should make the decisions affecting their children.

State-community Partnerships in Texas

Community decision-making is a new process the Texas Office of Early Childhood Development has found successful in thirteen community demonstration projects. One of those projects, Navarro County, serves to illustrate the process. The Office approached the Navarro County Judge with an idea for bringing to families more and better health, education and social services through community cooperation. The first step was appointing a Local Council representing children's interests. On the Council were parents, local officials and representatives of churches, schools, child-care facilities, and various public agencies. Through the guidance of this Council and with technical assistance from the Office of Early Childhood Development, the county began intensive study of the needs of its children under 6.

Once the needs were assessed, the county began to look at what existed in the county in the way of resources—public and private. The county decided to attack the problem

of the high infant death rate. Their solution was to hire a pediatric nurse to travel around the county providing preventive medical services. Today that nurse, working in cooperation with private pediatricians and various agencies, conducts well-baby clinics throughout the county. She gives immunizations, refers pregnant mothers to a public prenatal clinic at the Navarro County Memorial Hospital, and refers sick children to physicians. This project is doing a great deal of good because children and families who might never have seen a doctor are receiving health care.

This kind of community planning and cooperation helps dispel public fears. From the beginning, parents and local citizens are involved in all decisions. The state, by being a partner with the community, demonstrates that all programs are designed to assist parents in accomplishing more effectively their own goals for their children. Community values and cultural traditions are respected and preserved.

And what about families' dependence upon the state? Is it increased? From the experience of the Texas community demonstration projects, the answer is overwhelmingly "No." Let met give one example. The thirteen community demonstration projects, taken together, are providing child care to approximately 1,500 children—releasing approximately 1,000 parents for the labor market, because many of these are single parents. The provision of child care keeps many of these parents off welfare and generates additional tax dollars.

A benefit-cost study produced these findings:

1. Money spent by the state has a compounding effect on total resources devoted to day care. On the average, for each dollar expended on child-care services, $3.08 of nonstate resources was generated.

2. The income of families whose children received day care through the projects rose about 32 percent over a nine-month period. For every dollar of state money expended, family income rose by $1.86.

3. With the increase of family income came a corresponding decrease in Aid to Families with Dependent Children and Medicaid assistance payments by the state for an estimated 14 percent of families going off welfare. Each dollar expended on day care services yielded a return to the state of 48 cents.

4. When costs are adjusted by the benefits accrued, the actual state cost for day-care services appears to be 17 percent—that is, of every dollar expended on day care, the state paid only 17 cents.

5. Finally, health benefits to the children were estimated on the basis of the present value of income-loss avoided and treatment costs avoided as a result of the preventive health services provided by the projects. For each state dollar for health care, $8.44 in health benefits was provided.

The principle of community cooperation—with enthusiastic involvement of parents and other local citizens and with proper assistance in planning and coordination—can improve the lives of young children under 6 and their families. More recently, the Texas Office of Early Childhood Development has taken the community cooperation idea and transferred it from the area of children's services to the area of parenthood education. Education for the role of child rearing is very much needed in this country today. But *how* are parents to be educated? Shall it be in junior high school, high school, right after conception, after birth of the first child? Shall it be mandatory or voluntary? Shall there be opportunities for practical learning—that is, experience in caring for a young child—as well as theory? What topics shall be covered—learning, nutrition, importance of play, social development, grooming, husband-wife relationships?

States should recognize that communities already have a variety of parenthood education resources—high schools, hospitals, Red Cross units and YWCAs offer instruction in various phases of prenatal and baby care. States should also recognize that the needs for parenting education differ from community to community.

Recognizing that parenting needs differ and that communities have many parenting resources, the Texas Office of Early Childhood Development has provided funds and technical assistance to three counties to assess their parenthood education needs and develop their own programs, using resources already available in the community. Every decision is made by parents, local officials, professionals working with children, and representatives of various agencies providing children's services.

The three counties began their needs assessment in April 1975. They sent questionnaires to parents, held group meetings of parents, and interviewed representatives of various local agencies. They moved into the program development phase in December. The Texas Office of Early Childhood Development is eager to see what programs actually result and how the community cooperation principle works in the area of education for parenthood.

School-based Programs for Young Children

The cooperation of the total community is essential in meeting the needs of young children. Part of the community, of course, is the public school system. There are those who believe that the needs of young children and infants can be met by simply extending the educational system downward to include prekindergarten children. Those advocating some type of school-based programs for 1-, 2-, 3- and 4-year-olds should consider nine fundamental questions:[1]

1. What is the goal in working with young children?

2. How can we help strengthen in parents their capacity for facilitating the general development of their own children?

3. Is education about child rearing a proper "governmental" function? Or is it to be left solely to the family, with its cultural influences, its choice of religion?

4. Should the school system play an active role, or should the school provide space, some facilities and some child development specialists?

5. Is early childhood education a proper role for elementary teachers, or do they need to be retooled for the different tasks in developing young children?

6. Should early childhood education be carried out in a formal classroom situation, like kindergarten, or be done primarily in the home by parents who receive training, materials and support from the nearby school?

7. Should any effort to provide public early childhood education be extended to all children with handicaps or only to those whose family backgrounds will bring them to school without broad experiences and consequent educational deprivation?

8. Since the parent-child relationship is of overriding importance in the development of the child, how do the schools accept more responsibility without the parents partially losing their key role?

9. What should be the role of the State Board of Education and the State Education

[1]Many of these issues were discussed at a national conference on parent and early childhood education in Denver in February 1975. The conference was sponsored by the U.S. Office of Education in cooperation with the nation's major educational associations, the federal Office of Child Development, and the Day Care and Child Development Council of America.

Agency? How should their roles fit with that of the State Child Development Office, if one exists?

These questions deserve careful consideration as communities and states try to find ways to meet the needs of infants and other preschool children.

SUMMARY

In conclusion, the new knowledge about infancy holds great hope for preventing handicaps and maladjustments in children. The new knowledge must be made available to parents and to those who care for children while parents work. A state can assist in conveying the new knowledge about infancy through parenthood education programs and by offering training to those who work in infant-care facilities. Through all of its programs, however, a state should be guided by a public policy that the family is primary and that parents should be informed and caring. If supportive services to the family are necessary, then the state should assist communities in assuring that families have what they need to rear their children.

The knowledge of infancy breathes new life into the hope for social services and for extending the limits of human potential. Carl Sandburg once said, "A baby is God's opinion that life should go on."[2] That statement captures some of the hope surrounding the subject of infancy, especially for those who would like to resolve today's special problems.

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[2]Carl Sandburg, *Remembrance Rock* (New York: Harcourt, Brace & Co., 1948), p. 7.

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15

How to Establish and Operate an Infant-Toddler Development Project

Today a third of the mothers of preschool children in the United States are working outside the home. A concurrent increase in the number of single-parent families, along with a general rise in family mobility, has accelerated the need and desire for comprehensive developmental child care services. It has become increasingly clear that: (1) many young children are being and will continue to be cared for during the day by persons other than their mothers and (2) communities must face the responsibility of helping these mothers make arrangements for child care that will be in the best interests of the children. In view of these concerns, the almost total absence of community-based day care facilities for children under the age of 2 presents a critical deficiency.

Professionals in child development and family relationships are beginning to respond to these needs of mothers and very young children, as evidenced by recent programs established by Weikart (1969), Keister (1970) and Gordon (1970).

Hoping to contribute further to our knowledge about providing quality child care, the authors have developed three additional programs that serve infants and toddlers exclusively. The first of these, at the University of Tennessee, was in conjunction with the Knoxville Community Action Agency. The second, in a Knoxville housing project, successfully used paraprofessionals trained in the first program. The third, a model center in Dallas, Texas, has served as a demonstration of quality infant care, a training site for paraprofessionals and a program of parent education.

Each of the latter three programs was designed as a supplement to family care. Every effort has been made to encourage parental participation in formulating goals and policies, as well as in implementing activities. The centers have also realized their responsibility for providing families with needed information and assisting them with problem situations.

Out of these experiences grew the following suggestions for establishing and operating day care centers for infants and toddlers.

ESTABLISHING THE CENTER

Location and Physical Facility

In choosing a location, several considerations should be kept in mind:

Check census figures for high birth-rate districts, especially where these areas match target populations—as was the case in all three of our centers where federal guidelines require that low incomes be a necessary consideration for services. Other target populations might be single-parent or dual-wage-earner families.

Determine accessibility of public transporation and identify traffic flow routes. Both staff and parents may have to rely primarily on public transportation.

Recognize that convenience with regard to time and distance to school or work locations of the parents is also important. (The Dallas Center is located on the campus of a high school and adjacent to a 3500-unit public housing project where the teenage pregnancy rate is high.

Consider the availability of reliable, affordable health care that provides for emergency treatment and ongoing health maintenance of the infants.

Once you have established a location, obtain a suitable physical facility. Our facility in Dallas was specifically planned and built for day care, while the other two centers were remodeled sites. In most cases, child-care licensing laws will require certain minimum building standards. The building must afford appropriate square footage for the number of children served; must provide for or adjoin a kitchen, toilet facilities, storage rooms and an entry area. Two easily accessible outside entrances should provide fire exits. A separate entry-reception area is desirable to cut down on outside dirt in the primary care room. Toilet and washing facilities need not be separate for infant-toddler care; preferably they might be incorporated into the primary care room.

Outside space should be adjacent, fenced, well-drained, shaded and provide a variety of activities especially designed for toddlers. The inside of the building should be well-lighted, preferably with soft or indirect lighting. When suspending materials for visual stimulation, plan carefully so that infants are not forced to look up into bright or direct ceiling lights. The temperature inside should be uniform regardless of season. Since infants can be placed on the floor for the majority of their waking day, it is important that the floor-level temperature be closely monitored. Ideally, vent out heated and cooled air and keep humidity as nearly as possible to outdoor levels.

In designing the use of floor space for primary care of the infants, maintain large open areas if possible. Infants and toddlers are best grouped according to "vertical" or family clusters for health reasons. Use of low, sound-baffling barriers will help separate children without isolating the adults. Without some social interaction, the caregivers will fatigue quickly and seek social contact anyway, possibly leaving the infants unattended.

Equipment and Supplies

One of the first major tasks of a project staff is to purchase equipment and supplies. Considerations of health and safety, educational objectives, the proportion of crib babies to toddlers, staffing patterns and budget limitations are involved in selecting equipment. A critique of certain important equipment and supply items is presented below.

Diapers. Major decisions concerning diapers are whether to use cloth or disposable ones and, if cloth is chosen, whether to use a diaper service. If the center purchases its own cloth diapers, the problem of laundry facilities arises and another "household duty" is added to the daily chores.

A fair estimate of costs from a diaper service is $40-$50 per month (1975 prices) for one pickup-delivery per week to serve ten children, using six diapers per day per child. An associated problem is the odor of accumulated dirty diapers. Plastic pants are an additional expense.

Prefold disposable diapers, which can be purchased relatively cheaply, were judged more convenient at our centers. We chose to use diapers that were prefolded and unscented, bought by the case from a commercial department of a catalog sales store. The higher cost was justified by the convenience, disposability and higher absorbency of these diapers over cloth ones.

Diaper-changing Equipment. For diaper changing, purchase bath-table replacement tops, which can be placed on ordinary wooden tables. They are foam-cushioned and plastic-covered, have straps for holding the infants, can be easily cleaned and are portable. Medical-examination paper, which can be cut into squares and used under the child for each diaper change, will protect against spread of disease.

Preferably, a sink should be located next to the changing tables and the diaper storage cabinets. Dispensers for paper towels and liquid germicidal soap may be attached above the sink.

Cribs. Our experience led us to favor choice of a portable crib of a good quality wood, which could be conveniently disassembled into a playpen. The mattress that comes with the crib should be sturdy and light. Portable cribs can fit through doorways and be folded for convenient storage.

High Chairs. Durable, molded plastic high chairs are preferable to wooden ones because they can be cleaned frequently with hot water and soap. They are also lighter and less expensive.

Carpet. In our judgment, a large carpeted play area is essential. It provides a cushioned space for crawling and exploratory activities. In addition to reducing the noise-level, the carpeted area provides a place where caregivers can comfortably get down on the children's level to interact with them. The carpet should be a low, tight-looped pile, preferably designed for school or institutional use. Carpet should be vacuumed daily and professionally cleaned biannually.

Smocks and Linens. Smocks should be worn by the caregivers to protect both children and adults. If a washing machine is available, smocks and linens can be bought by the center and washed there. Although a linen service is more convenient and sanitary, it is expensive.

Play Materials. Toddlers need a variety of play materials to explore and thus gain confidence in their own abilities. Wherever possible, play materials should be chosen not just for their color, variety and size but also with consideration of washability. In our three centers, the infants either brought or were provided their own soft toys, which remained in their cribs.

Staff Selection

The director of the center is usually the person responsible for selecting the primary staff and for supervising all personnel, as well as for developing the daily program for the children and coordinating all facets of the program.

If funds allow, it is advisable to hire a registered pediatric nurse and a social worker on the professional staff. In many instances, a center needs to work with the parents in areas related to the health and nutrition of their infants. Families may also need help from the social worker regarding unemployment and other problems. Large programs may also wish to appoint an assistant director. Additional supportive staff may include an administrative assistant, a cook-housekeeper and a maintenance person.

The paraprofessional staff should be carefully selected, keeping in mind the applicant's previous experience with and interest in children, health and appearance, number and age of own children. The latter consideration is important because often mature women who have raised their families have much love and caring to give to infants. These persons have fewer babysitting problems or ill children and a less demanding life at home. The staff selected should convey willingness to work a long (eight-to-nine-hour) day and show a genuine interst in and liking for children.

Staff Orientation and Preservice Training

Before opening the center, all-day orientation sessions should be held in which all staff persons participate. Topics and activities covered during this period should include the following: the nature of procedures and policies at the center, activities and duties with the children, health and nutrition, and working with the parents. A staff handbook should be developed and given the staff members; it could provide detailed procedures for working with the children as well as personnel policies and guidelines for the staff. People in the local community can be called upon to help in the orientation program and in further staff training. Pediatricians, county health departments, nutritionists, day care licensing personnel and other resources can be most valuable in developing a beginning center. If staff members join an ongoing program, they should receive some preservice orientation from the director and other staff.

Initial Interview with Parents

It is important to establish positive contact with the infants' parents at the time of enrollment. Before each child arrives, the director, nurse, social workers and caregivers should meet with the parents. This contact gives the parents an opportunity to get to know the persons who will be caring for their child. A *Parent's Guide* or handbook detailing general policies should be given to the parents at this visit; it should explain in detail the policies of operation and give useful information to assure the parent that the child will be in a trustful environment while away from home.

Have preliminary forms filled out at this time. The family-child information needed includes: child's name, address and telephone number; mother's and father's place of employment and daytime telephone number; name and number of someone to call in case of emergency; child's patterns of eating, sleeping, toileting and general health; child's birth and medical history, including summary of diseases, hospitalizations and general health of all family members. An immunization card also should be required of each child.

During this first visit, discuss the daily routine and activities in the center and ask each mother for suggestions of ways to make her child's adjustment to a new environment as easy as possible. You can also note any special needs or concerns of the parents at this time. Ask all parents to notify the staff in the event of any changes in their child's daily schedule. Open and frequent communication between parents and center staff is necessary for the well-being of the children and the smooth operation of the center.

NUTRITION/FOOD PROGRAM

A center staff should strive to provide in the diets of the children nutritional adequacy that insures proper growth and development. It may be advisable to seek assistance from a professional nutritionist concerning meal planning and preparation, purchasing and storage of food. In addition, staff attendants should be instructed about basic nutrition, sanitation, safety and care of equipment.

For toddlers eating table food, ask the parent each morning to relate what the child ate the previous night. By receiving these home diets, your staff can more effectively supplement what is given to the children at home and in general know more about each child's nutritional needs. In the afternoon, tell the parent which menu will be served the next day. This procedure helps eliminate duplication of foods for the child, as well as keeping the parents informed. Following are some sample menus:

Menu #1	*Menu #2*	*Menu #3*	*Menu #4*
Chicken Legs	Beef	Vegetable Soup	Liver
Potatoes	Rice	Cheese Sandwich	Macaroni
Peas	Carrots	Fruit	Peas
Jello	Pudding	Milk	Peaches
Bread-Butter	Bread-Butter		Toast-Butter
Milk	Milk		Milk

Ordering of Food and Supplies

The ordering of food and supplies will depend upon the ages and eating patterns of the children. The following section contains quantities and time periods that may be useful as guidelines when purchasing food. Depending on the number of children in a center, it is most efficient to order food in bulk quantities from a wholesale grocer.

Baby food helpings per child per day (estimate for average child):

½ jar meat	1 pint milk (preferably iron fortified formula)
½ jar vegetable	1 slice cheese
½ jar fruit	4 crackers
10 oz. juice	¼ cup jello or pudding

Regular food helpings per child per day (estimate for average child):

¼ cup rice	1 chicken leg	1½ slice cheese
¼ cup vegetables	¼ cup chicken liver	5 crackers
¼ cup potatoes	1 fish stick	1 pint milk
½ cup fruit	½ cup macaroni & cheese	1 slice bread
½ beef pattie	½ cup soup	

HEALTH AND SAFETY PROGRAM

Healthy children are happy, exploratory and eager to learn. A primary concern of the center staff is to provide an environment that promotes good health and safety standards.

Before entering a program, the child should have a thorough physical and laboratory examination by a physician. Medical reports should be kept on file by the director. In addition, have the parent relate information concerning her pregnancy, birth of the child and health history. Keep a medical-visitation form in each child's folder and ask

the mother to report on the infant's visits to the doctor. Never give medicine to a child unless it is brought by the mother upon a doctor's prescription. The director and/or nurse should be responsible for recording the times the medicine is given. Instruct the mother to notify the staff when the medicine is to be discontinued. Require that each child have a physical examination at least every six months; infants under six months should be examined more frequently. Keep close supervision of the child's immunizations.

In case of any emergencies, notify the parent immediately. Children with minor illnesses (cold, upset stomach, etc.) may be kept at the center and isolated from other children. If a child becomes overly uncomfortable, upset or frustrated, call his mother and ask that he be picked up. Children with communicable diseases (measles, mumps) should be kept at home. Chronically ill children should be excluded from the center because of lowered resistance to serious illnesses.

The following staff guidelines are suggested to promote a healthy and safe environment:

1. Have all workers at the center wear smocks.
2. Insist that hands be washed frequently throughout the day with germicidal soap, particularly before and after diaper changes for children and before serving food.
3. Wash toys and equipment with disinfectant each day; also vacuum carpets daily.
4. Keep charts, immunizations and medical forms up to date.
5. When changing diapers, strap children securely on the diaper-changing table.
6. Store disposable diapers and/or cloth diapers in appropriate containers.
7. Place infants on their stomachs for sleeping.
8. Lock side rails securely in "up" position.
9. Be sure that each attendant knows where each child and other staff members are.
10. Be assured that at least one adult is in the playroom at all times.
11. Do not allow children to climb on tables or shelves.
12. Keep the playroom free of small objects that could be swallowed.
13. Before purchasing equipment, check it thoroughly for safety.
14. Dress children warmly for outside play in the winter months.

DAILY ACTIVITIES

A daily routine should be established for each center that will provide for both efficient operation and consistency of care for the children. This routine should be flexible and adaptable to the changing needs of the children. Strive to create an atmosphere in which children feel confidence in their emerging abilities and learn to control their environment successfully.

Vital to the development of this atmosphere is a staff that gives children many physical expressions of loving—as through holding, rocking, singing to and talking with them. Arrange a daily schedule that promotes trust on the part of the children and allows them a free environment in which to roam and explore.

A specific schedule for young infants revolves around feeding and sleeping periods. As the infants grow older and are awake for longer periods, plan specific individualized activities for them (see Gordon, 1970, 1975; Furfey, 1972). These might include manipulative toy activities, outside play, small group singing and story time.

Greet children and mothers warmly upon their arrival each morning. Request that the parent fill out an information sheet each day to report the child's behavior the previous night, including sleep patterns, food intake and other pertinent information. During the day, the caregivers will also record on this sheet similar items, as well as diaper changes and stimulation activities.

Remember to share this written sheet with the parents each night, as one way of letting them know about their child's daily life while away from them. Plan daily for a variety of stimulation activities for the infants and toddlers. These activities should be designed for several purposes: to assist the child in the development of basic skills such as eye-hand coordination, problem-solving and object-identification; to help the child become aware of how these skills are useful in exploration of the world; to further the discovery that learning is enjoyable and to enhance self-confidence in mastery of skills.

The caregivers need to learn to evaluate where each child is developmentally and how to facilitate further development. The choice of activities for each infant can be based on the child's responses to an appropriate evaluation instrument such as the Denver Developmental Scale, the Koontz Developmental Scale or the Bayley Infant Scales. Consider the child's development in the areas of gross motor, fine motor, language and social development. Utilize close observation of the child's responses and reactions to an activity to indicate levels of development. Above all, remember that the provision of a safe, secure and trust-promoting atmosphere is of primary importance in infant-toddler day care. When an infant feels safe, warm, loved and well cared for, he will reach out to his environment and learn from it.

An essential condition for all learning, whether it be child- or adult-initiated, is language. Expose the children continually to labeling, verbal expression of feelings, reflections of actions and conversation. An ideal time for this to take place is during routine daily activities such as diaper-changing and feeding.

Children, including infants, need guidance in channeling their impulses. Discipline should be positive and loving within an environment that is child-oriented and designed to enable the child to freely develop. Common problems, such as biting and hitting, are often the result of the child's displeasure and need for expression; such problems can be handled by gentle firmness, redirection and occasional separation from other children.

Staff Training

The director of the center should plan a comprehensive inservice training program for the staff. Included should be basic knowledge in infant and child development, family needs, community resources, curriculum-planning, observation skills and evaluation techniques. Do not limit the training to academic information; staff must learn to work together to enhance one another's skills. It is also vital to the smooth operation of the center that open communication among staff be established. Discuss all problems and policies openly. Each staff member must gain self-confidence and acquire a professional attitude toward his or her work. Time and attention taken to develop interpersonal communication skills will increase the staff's effective communication with parents as well as among themselves (see Keister, 1970; Dittmann, 1973; Honig, 1975).

PARENT-CENTER COMMUNICATION

Encourage frequent interaction between parents and staff of the center. Working together, they can reinforce each other's efforts to provide optimal care for the children. If a center served primarily families in which both parents are working, it may

prove difficult to have parent meetings. Therefore, the morning arrival and departure are often times when the most meaningful communication occurs between home and day care life. To inform parents of their child's activities during the day, staff should share information on the daily charts and encourage questions. Similarly, it is essential that parents relate to the staff the home environment and activities of the child while he is away from the center.

You can develop successful parent education programs that provide for early evening meetings, small group discussions or even Saturday classes. In a large center the social worker should be responsible for creating viable parent interest and involvement in the center. Consult the following resources for parent education (Aston, 1971; Brazelton, 1969; Gordon, 1970; Honig, 1975).

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Betty S. Wagner

Day Care: Planning for Learning in Infancy

Recognition of the importance of early experience for the growing person's total functioning has focused attention on all aspects of day care for infants. With an increasing emphasis on quality care has come a recognition of the cognitive content of activities in this period of the life span. As the number of infants in day care increases, the following question becomes crucial: How can the day-nursery teacher structure the environment of the room to promote learning for children under 2 years of age?

Managing the Environment

Persons experienced in working with infants recognize that activities need to be planned for the *individual* infant, who in the early months of life is in the stage of solitary play. Even at this level of development, however, children may benefit from socialization with each other. Not infrequently, at this stage a child engrossed in playing with a toy may find it removed from his hands by another infant who, only momentarily interested in the object, soon drops it for another toy. By the stage of parallel play, somewhere around the age of 2½, occasionally as many as three infants can engage in the same activity without interfering with each other. As children reach the stage of associative play, usually around the age of 3, it becomes possible to involve them in small-group activities.

Arrangement of the infant-toddler room may contribute to the quality of the learning environment. Large numbers of walking infants in the same room tend to overstimulate each other, even where space is adequate. Dividing room space with furniture, such as low bookcases, creates private nooks for the children to explore, permitting them to investigate the use of an object unhampered. A large cardboard box with an entrance cut in the side may also form a protected cubbyhole needed by the infant in the stage of solitary play. With ingenuity the teacher might create a mini-interest center by equipping each cubbyhole with its own toy or activity, which remains in this location. Enabling infants under 2 periodically to focus their interest on a solitary activity may allow them not only to gain in their understanding of object concept but also to lengthen gradually their attention span.

A higher level of curiosity and eagerness to learn can be maintained if toys available for use are rotated. A toy that has been out of sight for several weeks recovers its ability to intrigue the child. Boredom results when the same objects are on the shelves every day. The numerous small pieces of a toy should be kept together, if possible. A stacking toy, for instance, loses its ability to teach if its parts are evenly distributed across the room.

Contrast and variety, not only in activities but also in mood and tempo, are of benefit to the infant. Every day should have its moments of exuberation. Music is an excellent medium for establishing mood. A cassette tape recorder, which can be placed directly on the floor, is a sturdy, versatile piece of equipment to use with infants. At first, babies direct their attention to the recorder; later they begin to respond to the music itself. Children who have just begun walking have such minimal muscular control that their clapping and hopping do not keep time with the rhythm. After repeated experiences with music, however, they usually begin to respond with enthusiasm—particularly to music with a strong rhythm, which seems to elicit more activity. The best responses may be attained if someone sings the song. A situation to avoid is one in which a radio or other source of music is left on all day. Under these circumstances, infants begin to "tune out" the sounds.

Presenting the Activity

The ability to "tune in" to an infant's moods is especially important for an infant caregiver or teacher. Activities become learning experiences only when the infant is in a receptive state of mind. Birns and Golden (1972) found in a study of early cognitive development that pleasure in the learning activity was highly correlated with later performance on mental tests. Since the planned curriculum for each infant may consume only a small portion of the day, best results are obtained when the teacher presents the learning games or activities at a time that the infant is alert and comfortable.

Play materials—though valuable as media for learning object concepts, cause-and-effect relationships and spatial relationships—remain secondary in importance to human interaction. An object or an activity that fails to gain the interest of the infant, even though suitable for his developmental level, may be invested with new importance and appeal if the teacher joins the activity. Verbal labeling of objects also increases the infant's interest in the named object (Roberts and Black, 1972), in addition to promoting his understanding of language.

"Conversing" with the pre-verbal infant when performing caregiving activities stimulates him to respond in imitation. A moderate level of arousal and excitement on the part of the baby are needed before he is activated. Babbling appears to be related to an emotional state of pleasure or joy.

The educational component of the program can be integrated comfortably and naturally into the pattern of the day's activities if the teacher remains seated on the floor, available to the infants much of the time. The infant is then free to initiate the interaction, also.

Matching the Developmental Level

Activities can become learning experiences when they meet the developmental needs of the infant. The teacher who works with children needs to become a careful observer of behavior, which offers clues to developmental levels. Piaget (1954), the meticulous, insightful recorder of stages of cognition during infancy, offers the staged descriptions of infant behavior around which the following curriculum is primarily organized.

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STAGES I AND II — 0–4 months

OBJECT

Shows elementary recognition of familiar *objects* and situations without knowledge of their permanence.

1. *Follows a slowly moving object with his eyes.* While infant is lying on his back, move a brightly colored squeak toy into his line of vision about 10" from his face. Slowly move the toy over his face toward the midline of his body. Do his eyes follow the toy? If he loses interest squeak the toy.

2. *Follows a slowly moving object by turning his head.* When infant is able to follow the toy to midline, move the toy slightly past midline. Does he turn his head to follow the toy? Move the toy in large circles over his face. Does he move his head to follow? Reverse the direction of movement.

3. *Maintains gaze at place where object disappears.* While infant is lying on his back, hold a brightly colored toy over his face. When he moves his head to follow the toy, slowly move the toy to one side; making it disappear below the level of the mattress. Does his gaze linger at the point of disappearance? Make the toy reappear, disappear again. Make part of the toy reappear.

SPACE

Begins integration of responses to sensory stimulation.

1. *Touches, grasps objects that contact hand.* While infant is lying on his back with his hands on his chest, tap a hand with a rattle. Does he open the hand to feel? Raise his hand and the rattle slightly so that he can see, also.

2. *Brings objects to mouth.* Place a rattle in infant's hand. Does he bring it to his mouth?

CAUSALITY

Displays beginning awareness that certain combinations of acts and expectations are related to desirable events.

1. *Exercises reflex behaviors.* Place in infant's hands a loosely stuffed cloth toy. Does he alternately clutch and release the toy?

2. *Positions himself for seeing and eating.* Keep infant's bed positioned so that daily activities occur on two or more sides. Does he push up on his arms when on his stomach? Does he arch his back and neck to look backwards when on his back?

Handle the infant in the same manner at each feeding. Does he turn his head in the right direction? Does he open his mouth in anticipation?

STAGE III — 4–8 months

OBJECT

Demonstrates knowledge of an *object* as an extension of one's own action.

1. *Removes obstacles to his vision.* While infant is lying on his back, cover his face with a 4" square of cardboard. If he does not remove it immediately, call his name. Repeat activity, using cloth instead of cardboard.

SPACE

Exhibits coordination of perceptual *spaces*.

1. *Localizes the source of sound.* Seat infant on your lap with his back to you. Speak in his left ear. Speak in his right ear. Which way does he turn?

2. *Locates an object at the end of a trajectory.* Seat in-

CAUSALITY

Demonstrates recognition of his activity as cause of events.

1. *Repeats actions that produce an interesting result.* While infant is lying in bed, suspend over the crib an object that will swing when hit. Does he keep it moving?

2. *Uses gestures to maintain an activity.* Initiate an

	TIME	SELF	LANGUAGE	
	Exhibits awareness of duration and of a sequence of states.	Is unaware of his own selfhood, responds to mood of caregiver.	Attends to language of adult.	
	1. *Performs certain acts before others in regular order.* Infant may perform acts such as sucking with little evidence of intention, such as looking at the thumb before he sucks it. While infant is forming perceptions of "before" and "after" a regular daily routine of feeding, bathing, and playing will favor the formation of a sense of time.	1. *Quiets when picked up.* Does infant stop "fussing" when you pick him up? When physical needs have been met, some of infant's waking periods might be spent nearby so that he can watch and interact with you. Some time should be spent each day soothing, rocking and singing to the infant. 2. *Smiles at playful contact.* Hold infant's hands and move them rhythmically. Does he smile or even laugh aloud? Hold his feet and pat them together or put your hand on his tummy and shake his body.	1. *Moves mouth and body rhythmically to adult speech directed to him.* Talk to the infant in a pleasant tone of voice. Position your face about 10" to 12" from his while talking. 2. *Coos, using mostly vowel sounds.* When infant coos, repeat to him the sound that he has made. Does he respond to you with more cooing?	STAGES I AND II — 0–4 months
	TIME	SELF	LANGUAGE	
	Shows ability to anticipate an elementary sequence of events.	Forms an internal image of caregiver; can wait for comfort.	Responds to words and tone of voice.	
	1. *Applies time to the sequence of events through action.* Suspend a rattle over infant's crib using ½" elastic. Tie a string to the rattle and put the string in his hand. Move his hand to make the rattle move. Does he repeat	1. *Responds happily to human faces.* Talk and smile when you are around infant. Respond to his happy gestures. 2. *Discovers his hands and feet; explores facial features of other people.* Make hand	1. *Turns his head toward sound of adult voice.* Speak to infant from different areas of the room. Encourage him to turn around to look for you. 2. *Smiles or vocalizes to adult imitation of his sounds.*	STAGE III — 4–8 months

	With infant in sitting position, hold the cardboard in front of his eyes. While facing him, call his name. Does he move his body to see? 2. *Searches for an object at the end of a vertical trajectory.* Seat infant on the floor. Hold an object above his eye level. While he is watching, drop the object. Does he search for it on the floor? 3. *Follows the horizontal trajectory of an object by turning head.* Seat infant in a high chair. While standing behind him, move a toy horizontally from right to left across his line of vision. Does he turn his head to follow the toy? 4. *Obtains a partially hidden object if he were already reaching for it.* Place a toy in front of infant. As he reaches for the toy, partially cover the toy with a cloth. Does he continue reaching for the toy?	fant on the floor facing you. Hold a toy in front of him at eye level. Quickly move it to the floor to his right and slightly behind him. Repeat to the left. Does he search for it with his hand? Hold infant on your lap. Drop a soft toy in front of him. Do his eyes follow the trajectory?	activity of interest to infant. For example, while he is lying in his crib, move a small doll toward him until it touches his body. Stop the activity abruptly. Does he attempt to begin the activity again by kicking his legs, hitting his hands on a surface, arching his body, etc.? 3. *Attemps to continue an activity by starting the movements involved.* Seat infant on your knees. Bounce him in a way that he enjoys. Stop abruptly. Does he jump to make the activity begin again? Snap your fingers several times. Hold your hand where infant can reach it. Does he strike or shake it to begin activity again? 4. *Attempts to continue an activity by imitating adult.* Make a sound such as a cough. If infant imitates sound, repeat it. Does he imitate sound again to continue game?	
STAGE IV — 8–12 months	**OBJECT** Demonstrates knowledge that *objects* continue to exist at first point of disappearance.	**SPACE** Demonstrates mental structuring of *space* that begins to extend beyond immediate perception.	**CAUSALITY** Exhibits recognition that other people can *cause* events.	
	1. *Obtains an object from behind a barrier.* Allow infant to handle a medium-sized toy or doll. Using your body as a visual barrier, place a toy barely out of sight. Encourage him to find the toy by momentarily moving it into view, if necessary to entice him. 2. *Obtains a partially or slowly hidden object.* Hold a small object in your hand. Slowly close your hand so that object is hidden. Open hand. Repeat several times. Does infant search for the object when your hand is closed? Attach a string to a toy. Allow infant to hold toy.	1. *Forms concepts of "behind" and "in front of," turns objects over to observe the reverse side.* While infant is sitting on the floor, slowly move a toy behind him. (He will at first rotate his body in the direction of the toy's trajectory; later, in the opposite direction.) Place the toy behind your body. Present objects to infant that will need to be reversed to be used; a cup with the handle away from him, a bottle with the nipple away from him. 2. *Brings objects together without understanding their solid properties.* Provide a rock-a-stack toy. Does infant	1. *Attempts to continue (or discontinue) an activity by touching adult's hand.* Seat infant on the floor, facing you. Cover his lap and legs with a cloth. Put your hand under the cloth and grasp his foot. Does he push the visible part of your arm? Make sounds with your mouth (singing, whistling) that interest infant. Stop abruptly. Does he touch your lips to begin activity again? Begin an activity with your hands that interests infant (snapping fingers, drumming on a surface, clapping, etc.). Stop abruptly. Does he touch your hand to begin activity again?	

	the action? Do his eyes move to the rattle *after* he pulls the string? 2. *Localizes objects in time.* Seat infant in front of you. Hold your hands about 18" apart in front of the infant. Snap your fingers in a regular, continuous rhythm. Does he anticipate the sequence by looking at the fingers before you snap them?	mitts for infant from colored socks. Put colorful bootees with small bells on his feet. When infant attempts to put his fingers in your mouth, eyes, etc., hold his hand and help explore facial features. Verbally label eyes, nose, ears and mouth. 3. *Recognizes human characteristics of dolls, pictures of faces, and his own mirror image.* Provide a small doll with which infant can play. Hang or mount pictures of people at his eye level in room. Glue magazine pictures of people to blocks. Hold infant to a mirror frequently. Mount a stainless steel mirror low in room.	Repeat sounds infant makes. As you do so, stroke his stomach, move your head close and smile. Touch infant's nose. Touch your nose. Shake your head. Does he imitate you? Smile. Does he imitate your smile? Make one sound that you have heard him make. Does he imitate the sound?	
	TIME Exhibits beginning ability to reconstruct short sequences of events independent of the self.	**SELF** Exhibits emotional attachment to another person or persons.	**LANGUAGE** Responds to simple commands; imitates sounds and simple words.	
	1. *Exhibits an ability to recall events.* While infant watches, place a toy behind a piece of furniture or in some other unusual location. Take him from the room for several minutes. Return with him to the room; ask him where the toy is located. Can he point to the location?	1. *Forms concept of person permanence.* Cover your head with a cloth. Will infant lift cloth to establish eye contact? Play hide-and-seek, leaving some part of yourself visible. Let infant take turns at hiding. 2. *Demonstrates preference for one or two persons among his caregivers.* One or two persons might be primarily responsible for physical care of infant. If shyness with other people becomes pronounced, primary caregivers might take him out among other people (shopping, etc.).	1. *Babbles, reduplicating sounds that show emphasis and emotion.* Respond to infant's babbles with conversation. 2. *Imitates sounds made by others.* Repeat one of infant's sounds and laugh. Does he imitate? Say "Bye-bye" and "Hi" at appropriate times. Encourage him to imitate you. Make a coughing sound. Make a sniffing sound. Does he imitate? 3. *Understands some simple commands.* Make simple requests that call for some action from infant: "Hand me the block" and "Get the cup," etc.	STAGE IV — 8–12 months

	Slowly pull the toy from his hands and let the toy disappear under a cloth. Encourage him to pursue toy. Seat infant on floor facing you. Cover his legs with a cloth. Put your hand under the cloth and grasp his knee. Lift the cloth while holding his knee. Cover his hands with a cloth. Place a toy in his hands. Uncover his hands. Hand infant an interesting object. Take the object and partially hide it under a cloth. Can he find the object?	push the ring against the pole? 3. *Understands the relationship between the container and the contained.* Present infant with three or four blocks and a small plastic bowl. Does he place the blocks in the bowl? If not, place the blocks in the bowl (not allowing him to watch) and give him the bowl with the blocks inside.		
STAGE V — 12-18 months	**OBJECT** Demonstrates knowledge of an *object* as a permanent entity, which occupies only one location.	**SPACE** Shows recognition of relationships between (1) objects in *space* and (2) objects and self.	**CAUSALITY** Exhibits beginning union of intentions with actions.	
	1. *Finds an object hidden in one of two locations.* Using two medium-size paper sacks, hide a toy in sack #1 while infant watches. If he correctly finds the toy, hide it again in sack #2. Does he now search in sack #2 or does he return to sack #1? 2. *Finds an object hidden in one of three locations.* Add a third sack to the game. While infant watches, hide a toy in the third sack. Does he look in the third sack first? 3. *Finds an object after a series of visible displacements.* While the infant watches, lower a toy into sack #1. Without releasing toy, lift it from sack #1 and put it in sack #2 while he is watching. Does he look in sack #2 first? If he does, lower the toy first in sack #1, then in sack #2 and finally in sack #3. 4. *Finds an object inside two containers.* While infant watches, wrap a toy in a piece of paper and place the wrapped toy in a sack.	1. *Understands "placed upon," begins to stack objects.* Provide blocks that infant can stack. Build a tower of blocks and let him (a) knock over the stack and (b) remove each block, one by one. Can he remove the top block without touching others? 2. *Understands gravity.* Using a board, make an incline. Roll or slide a toy down the incline. Allow infant to roll or slide toys down incline. Provide a bucket and numerous small objects to put in bucket. Does infant throw objects into bucket or allow them to drop? 3. *Retrieves an object by following its trajectory.* Roll a ball behind a piece of furniture. Encourage infant to retrieve it. 4. *Retrieves an object by moving in direction opposite to trajectory.* Same as #3 above. 5. *Brings objects together systematically.* Provide in-	1. *Places an object into position to put itself into motion.* Secure a low table or an overturned box. Place toys, blocks and balls on the box or table. Does infant slowly push the toys over the side? 2 *Recognizes another person as an independent causal agent.* Initiate an activity that is pleasant for infant (rubbing his back, etc.). Stop the activity abruptly. Does he place himself in position for you to resume activity? While infant is in a swing, on a rocking horse or similar motion-producing equipment, unobtrusively interrupt his motion. Does he look around for the cause of the interruption? While he is watching, drop a box on the floor several times. Does he return it to your hand to watch it drop again? Place a small toy in a match box. If infant returns it to be opened, show him how to do it.	

		3. *Recognizes mirror image as being himself; begins to identify body parts.* Continue to provide opportunities for mirror play often. Provide an old box purse with a mirror in the lid, or glue a mirror to the bottom of a cigar box. Play "Pat-a-Cake" and "This Little Piggy." Ask infant to point to his eyes, ears, nose, mouth, legs, arms and feet as you name them. 4. *Recognizes own name.* Place cloth over infant's head. Say, "Where is Jimmy?" Does he raise the cloth to look at you?		
	TIME Demonstrates ability to arrange in temporal order a series of external events.	**SELF** Shows beginning ability to dissociate the outer world from the *self*.	**LANGUAGE** Intersperses babbling with real words; understands much that is said to him.	**STAGE V — 12–18 months**
	1. *Forms concepts of "before" and "after," which are independent of his actions.* Talk to infant about the sequences of events. ("After Daddy comes home, it will be time to eat.")	1. *Responds to instructions relating to use of body parts.* Face infant and ask the following questions: "Can you clap your hands as I do?" "Can you close your eyes as I do?" "Can you hold your nose as I do?" "Can you open your mouth as I do?" "Can you put your hands over your ears as I do?" 2. *Recognizes ownership of objects.* Ask infant to respond by pointing to the following questions: "Where is your shoe?" "Where is my shoe?" "Where is your book?" "Where is my book?" "Where is your chair?" "Which shoe is Daddy's?" 3. *Responds to adult's emotions; shows affection and jealousy for other people.* Look at books with infant that show adult animals with baby animals. Look at books that show human families and their relationships to infants and children. Express approval for infant's actions as often as possible.	1. *Associates mental images of objects in his environment with their verbal labels and pictures.* Seat infant on your lap and look at a book with him. Name objects in the book. Select a book that shows objects with which he is familiar. 2. *Imitates sound and cadence of adult speech with expressive jargon which contains a few intelligible words.* Respond to infant's jargon in a companionable, conversational manner. Repeat and respond to words spoken by him. 3. *Communicates with self, sometimes mediates communication through adult.* Respond to infant's verbalizations by helping him to form generalizations, make classifications, etc. For example, when he says "No-no" on the way to a forbidden object, respond with, "That's right, mustn't touch the television set." 4. *Expands vocabulary, speaks in one-word senten-*	

		fant with a series of three nested boxes or bowls. Does he *attempt* to nest them? Provide a rock-a-stack toy. Can he place two or more rings on the post without help?		
STAGE VI — 18–24 months	**OBJECT** Shows ability to recall an absent *object* and deduce a sequence of possible locations.	**SPACE** Demonstrates knowledge of *space* as a container for one's own body, other people and objects.	**CASUALITY** Demonstrates (1) recognition of centers of *causality* outside one's self and (2) representation to one's self of "causes not perceived and effects not yet produced."	
	1. *Follows an object through one hidden displacement.* While infant watches, place an object in a box. Cover box with a cloth. Leave object under cloth. Remove empty box and show it to him. 2. *Follows an object through one hidden displacement with two screens.* Same as #1 above. Hide object in box. Leave object under either of two cloths. 3. *Follows an object through one hidden displacement with three screens.* Same at #1 above. Hide object in any of three locations. 4. *Obtains an object after a series of hidden displacements.* While infant watches, hide a toy in hand. Then move the hand under each of three cloths in succession, leaving toy under last cloth. Later, leave toy under other cloths. 5. *Finds a toy inside three containers.* Wrap a toy in a piece of paper; place the wrapped toy in a wide-mouth jar; place the jar in a box and close the lid. Allow infant to find the toy. Repeat the process, only omit the toy. Does infant become interested in the containers or does he remember that he was looking for a toy?	1. *Makes detours without following trajectory to obtain an object.* While infant watches, drop a ball over a barrier. Encourage him to go around barrier to obtain ball. Arrange a cul-de-sac barrier around infant. Drop object over barrier. 2. *Solves two- or three-piece puzzles.* Make simple geometric shape puzzles from poster board. 3. *Shows foresight in fitting one object into another.* Give infant a long chain necklace bunched into a cup. Empty cup. Allow him to discover means of replacing it. 4. *Uses one object to obtain another.* Place a toy out of reach of infant on a table. Place a stick nearby. If he does not solve the problem of obtaining the toy with the stick, demonstrate the method. 5. *Associates persons with locations.* In a familiar setting, ask questions relating to persons known by infant: "Where does Daddy sit?", etc. 6. *Demonstrates understanding of "right side up."* Present pictures, books and other objects to infant upside down. Does he rotate them to the correct position?	1. *Searches for independent causes of events.* Wind a mechanical toy without infant's viewing the procedure. After the toy action is over, observe his behavior. If he returns the toy or tries to activate the mechanical portion of the toy, show him how it works. Allow infant to help operate some simple mechanical gadgets around the house. Provide toys that require manipulation: snap beads, spools to string, etc. Attach to plyboard objects that require manipulation. Zippers, door-bolts, plastic jars with screw lids, and stationery boxes are suitable objects for this activity.	

			ces. begins to combine words. Tell infant the names of objects around the house, names of clothing items, names of foods. Speak to him in simple, short sentences.	
	TIME Exhibits (1) memory not related to direct perception and (2) location of one's memories in *time*.	**SELF** Demonstrates recognition of himself as an object among objects, contained by space; related to, separate from, but dependent upon other human beings.	**LANGUAGE** Combines words into sentences.	
	1. *Recalls past events.* Talk to infant about events of the recent past. Ask him to recall for you sounds of past events. ("How did the doggie sound?") Ask him to recall where people went. Does he point to indicate the direction they took when leaving? Ask him to recall his actions. ("What did you do when the cat scratched you?")	1. *Develops a sense of autonomy.* Allow infant to perform as many tasks for himself as possible. 2. *Begins to localize functions of sensory organs.* Give infant a cardboard tube. Ask him to look through tube at another person in the room. Ask for the following responses: a. Feel the rug. Show me what did you feel with. b. Smell this flower. Show me what you smell with. c. Listen to this clock. Show me what you hear with. 3. *Recognizes his body as an object in space.* Provide a large cardboard box for infant to play with. Ask him to get *in* the box. Give other simple instructions such as, "Go around the chair."	1. *Expands vocabulary, combines words into sentences.* Use adjectives and adverbs when talking to infant. Give simple explanations in addition to commands. Read books to infant that have some story content. Ask him to demonstrate the use of some of the objects in the book. Sing, play finger-games, repeat nursery rhymes to infant. Give infant a toy telephone.	STAGE VI — 18–24 months

34

Bettye M. Caldwell
Joan Rorex

A Day at the Kramer Baby House

Quality day care for infants and young children can be provided in a variety of settings. As one example, the authors have for several years been engaged in the stimulating and rewarding process of attempting to create a day care environment that meets the needs of young children and their parents in what appears to many to be a most *improbable* environment—a public elementary school.[1]

Since 1969, Kramer Elementary School in Little Rock, Arkansas, has been the site of a special project designed to offer a creative early childhood education and day care program with continuity of support throughout the elementary years.[2] Major concerns of the project staff have included development of a human relations program and more humane discipline procedures, identification of learning styles of young children, effective and workable staff-development activities, collaboration with parents in all aspects of the program, social policy relating to children and families, and development of a model that facilitates the conduct of research and development activities within the public school.

One year after Kramer had been converted to a "special project" school, it added an infant program—thus fulfilling the objective that the model program should offer developmental and educational services for children from infancy through the end of the elementary years, with an active parent component at all levels.

Since the main school building had certain architectural features that made it seem less than perfect for infants (chief among which was the presence of a dozen or so steps at every entrance), it was necessary to add to the campus a portable classroom that housed the infant program. Very quickly the Kramer children named this trim little

[1]The Center for Child Development and Education (the Kramer Project), College of Education, University of Arkansas at Little Rock, and the Little Rock School District. Financial support has been provided by a number of sources since the inception of the project, most notably the Office of Child Development from 1969–75 (Research Grant No. SF-500). At present, the infancy and early childhood components of the project are funded through Title XX of the Social Security Act. We are extremely grateful to the various staff members in the Arkansas Social Services who helped us work out the details of the complicated arrangement that made it possible for a public school district to be the contractor for a Title XX day care center.

[2]For a description of the full program, see "The Kramer Adventure: A School for the Future?" by Phyllis T. Elardo and Bettye M. Caldwell, in *Childhood Education*, Jan. 1974, pp. 143–52.

facility the Baby House (it has a fence around it and enough of an assortment of play apparatus and toys in the yard to give it something of a "fairy-tale" appearance). The parents picked up this label, and the staff soon followed suit—in spite of our determination that the infant program be recognized not as an isolated unit but as a component of the total Kramer program. Today our infant facility is known as the Kramer Baby House.

In this paper we invite you to join us as we see what takes place during a day in our Baby House. We should warn you that, unless you are in excellent physical condition, you will be tired at the day's end!

At present 14 children are enrolled in the Baby House, with three full-time aides and one certified teacher (Joan Rorex). The teacher is not in the Baby House at all times, since she also has responsibility for coordinating the day care program for the entire school (functioning essentially as an assistant principal for the early childhood-day care component of the program). She is always there, however, during the "prime teaching periods" (roughly 8:30–10:00 and 2:00–4:00) and carries the main responsibility for daily and weekly planning.

In describing a "typical day" (all teachers know there really is no such thing!), we shall try to convey the flavor of all the activities available to the children. In addition, we shall seek to make the typical day more meaningful by including actual observational data obtained for one particular child, a 13-month-old girl given the fictitious name of Marsha. After this recounting of a day in the Baby House, we shall discuss briefly the rationale for our approach and exemplify the process by which daily plans are made.

A Typical Day

6:45 a.m. The winter sun has not yet risen when Mrs. C., an aide who lives nearby, arrives and unlocks the door to the Baby House. Traffic on Little Rock's main Interstate Highway rushes noisily by just a block away; however, the street on which Kramer sits is not a main traffic artery. The heaviest traffic on the street at this hour is provided by cars driving up to the school and leaving children for the day. (Of the 75 children under five enrolled in the Kramer Day Care Program and the 50 elementary children enrolled for either before- or after-school care, 75 are in the building by 7:30 each morning.)

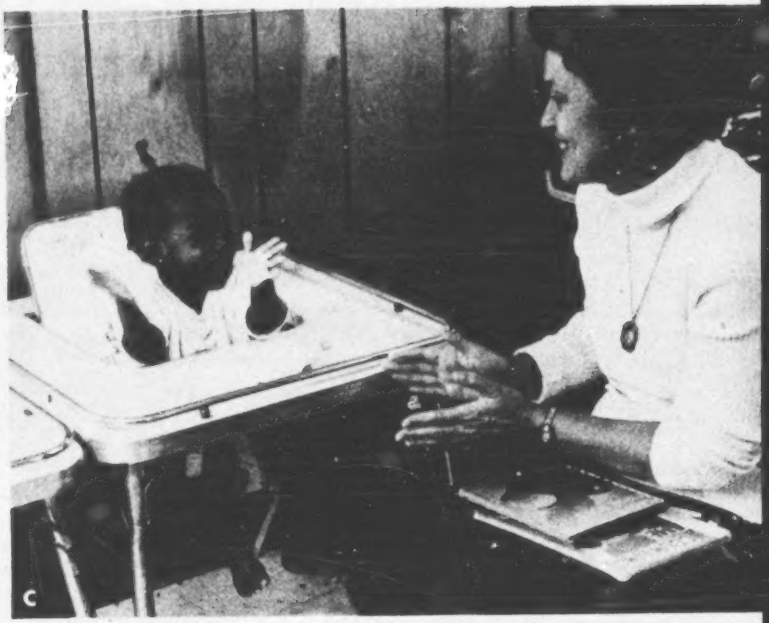
Marsha's mother, who has to be at work by 7 a.m., is often in the parking lot waiting for Mrs. C. to arrive. Today Mrs. C. goes directly to the car, lifts Marsha out, and takes her up to the door with her; Marsha's mother does not get out of the car (an exception—usually she takes Marsha in and chats for at least a few minutes before rushing to her job).

Mrs. C. puts Marsha down and talks to her while taking off the child's jacket. Telling Marsha she looks pretty, Mrs. C. suggests she put her coat in her drawer. Mrs. C. takes off her own coat and puts away her purse; then she takes off Marsha's shoes and socks and long pants and puts on one of the little terry cloth "aprons" the Kramer babies wear during the day. Since the Baby House is snug and warm and carpeted (except for the eating area), our babies go barefoot most of the time. This policy facilitates their walking and helps avoid having little fingers stepped on by hard-soled shoes, etc.

Mrs. C. also checks Marsha's disposable diaper and, finding it wet, discards it and puts on a dry cloth diaper. (Had Marsha been wearing a cloth diaper, it would have been put into a plastic bag, securely tied, and then sent home with Marsha at the end of

A DAY AT THE KRAMER BABY HOUSE:

(A) Sometimes babies are sound asleep when they are brought to the center. In such cases we wait until they waken to dress them and have them join in the daily routine. (B) Snack time presents an opportunity for reading a book or playing word games. (C) Although there are two formally



scheduled teaching periods during the day, informal teaching goes on all day—in a joyous atmosphere. (D) "Marsha, can you play pat-a-cake with me?" (E) "How big is Wanda? Wanda is so-o-o big." (F) "Right—Susie's dress is yellow too!" (G) After school, several elementary children who have younger siblings in the baby house join them to await the arrival of their parents.

the day. Today more and more mothers are using disposable diapers, either altogether or at least when they bring their children to Kramer.)

By the time Mrs. C. has finished, another baby is brought into the Baby House; and the procedure is repeated. Mrs. C. finds time to put out a selection of play materials with which the arriving children can occupy themselves. Officially a "free play" period, during this part of the morning could be more aptly described as an "individual attention" period. As each child is brought in, that child and his or her parent receive direct attention from the staff person or persons on duty. This takes the form of talking or playing a favorite game with the baby and conversation with the parents (reporting some of the baby's achievements of the day before, mentioning concerns or problems, discussing special procedures, asking for information, talking about the parent's job situation, etc.). These interchanges generally are brief, as a steady stream of arrivals appears during the next hour.

When the second baby comes, Marsha, who has just learned to walk, drops to all fours and crawls to the changing table, reaches up, grabs Mrs. C.'s dress, and whines. Mrs. C. looks down and says, "Why, hello, Marsha" and hands her a clean wash cloth to play with. "Want to wash your face?" Marsha waves the wash cloth a few seconds, drops it, and crawls over to the other side of the room. She pulls herself up on the couch cushion and stands there "bouncing" a while quite happily.

The second staff member arrrives at 7 a.m. and a third at 7:30. Thus, although Mrs. C. is not without help for a very lengthy period, it seems there are never enough hands to go around during this time. Older children who either bring or accompany a baby brother or sister often stay for a short while and "help" with the babies (play with them). This cross-age contact, encouraged throughout the day, is very easily arranged at Kramer. Older children in the school get to help in the Baby House as a reward for good citizenship and commendable academic progress. And some of the staff have young children (but older than the babies) who like to play in the Baby House until their class activities officially begin.

At 7:55 an announcement from the principal's office in the main school building is broadcast into the Baby House. One item in the principal's announcement is a reminder that three visitors from North Carolina who will be at Kramer that day and plan to spend most of their time in the Baby House (a list of the names of the visitors has already been circulated among the staff). Most of the babies look up at the spot on the wall where the sound comes from but look away after a few seconds.

Marsha crawls over toward the speaker and looks up briefly, notices that she is right beside the slide, and crawls through the tunnel that is part of its support. She stands by the steps, where an aide notices her. "Want to go down the slide, Marsha?" she asks and walks over to Marsha. The aide lifts her up to the slide (only two feet off the floor). She then stands to one side, puts Marsha on the slide on her stomach and then takes her off at the bottom. The two of them repeat this action for a few times. A baby cries on the other side of the room, and Marsha crawls off in that direction.

8:30 Twelve of the 14 children are now in the Baby House, and a breakfast snack is served. Depending on their maturity level, children either sit in feeding tables, in low chairs at a round table, or are held by staff members. Snack consists of juice, cereal, and milk. During this time, staff members read stories to the children, sing to them, recite nursery rhymes, play finger games, etc. They also "talk" about what they will do during the day, about something that happened to one of the children (*"Marsha's mommy took her to get some new shoes"*: *"Where are your new shoes, Marsha?"*), about what they are eating and how they are eating (*"Look at the way Marsha holds her glass like a big girl"*), about what the staff members are wearing or what they have

been doing (*"Mrs. Rorex has a new haircut"*), etc. This period is roughly the equivalent of circle time for older groups.

Marsha eats very slowly, using her spoon at times and sometimes picking up pieces of cereal with her fingers. Mrs. M. reads a picture book to Marsha and one other baby. The other baby points and says "Goggie" (for doggie). *Marsha watches intently but does not point or attempt any words in response to Mrs. M.'s invitation to her to do so.*

9:00 As soon as most of the babies have finished their breakfast, the first formal activity period begins. Teaching activities are led by two of the staff members, while the other two serve as "floaters" and are occupied either cleaning up after snack or providing physical care to some of the children (washing, diapering or toileting, putting a child to bed, getting one up, etc.). The two activities today relate to Objectives 48 and 51 (to be described in greater detail later).

Mrs. Rorex, who has set up plastic cups and rice, is encouraging the five children who have joined her to pour from one container to another. Mrs. W. has dress-up items in front of the mirror, and four of the children are putting hats on themselves and on one another.

Marsha (who is one of the youngest in the group) is being diapered and washed. Just as she is put down on the floor from the changing table, the visitors walk in. She crawls over to one, who looks down at her and smiles and then asks Mrs. Rorex if it is all right to play with the baby. Receiving a nod of assent, the visitor sits down on the floor by Marsha and holds out her hand to her playfully. Marsha takes it and pulls herself to a standing position. The two of them interact playfully for a moment, when suddenly Marsha begins to cry (as though just recognizing that the lady is a stranger). Mrs. W. comes over and says, "Let's go take a nap, Marsha," picks her up, and rocks her as they walk together to the bedroom. (Marsha, put down in her crib, sleeps a little more than an hour.) Three other babies are also napping.

Back in the playroom (really the "living room" of the Baby House), we hear a great deal of excited noise. By now all three visitors (plus Bettye Caldwell, who is serving as the staff escort) are interacting with the babies. One visitor is taking pictures, and most of the babies frown at the flash of light.

The last staff member arrives (9:15), and several of the babies run to greet her. As the first activity is just wearing down, she senses that the children are a bit restless and invites some of them to come over to the couch and sing with her. Eight babies crowd up onto the couch to listen or to "sing along" with "If you're happy and you know it, clap your hands." Two or three babies clap their hands (belatedly) and smile shyly as the visitors and the staff praise them.

9:30 Two additional activities are begun, today objectives 79 and 153 (both involving small pieces of dry cereal and small jars). Most of our teaching activities are carried out on the floor, with the teacher sitting there and inviting some babies to join her. As the children get older, they like to sit at the round table where they have their lunch; therefore some activities are offered there. The tables for lunch and feeding are often used for art activities. However, the floor is where most of the action takes place.

During this time, all the babies not toileted during the first half of the period are now changed or put on the toilet. We try to take the lead from parents about toilet training in terms of when to start. Occasionally a parent becomes angry because we will not spank a child who has an accident, but this sort of clash between home and center appears to be much less common today than it once was.

Toward the end of this period, all children who are awake are dressed to go outdoors. Any other children who take morning naps will be put in their cribs at this time. Those children intensely involved in the teaching activities will be dressed last, to permit them to finish "working."

10:00 In our part of the country, we do not have many days when the children cannot go outside. Our outdoor play is fairly loose and unstructured, although some adult guidance is always provided. Our playground contains a small swing set, crawling tunnel, sand, an inclined plane, and a playpen with small toys. Also, we take outside a large toy box containing toys the children enjoy outdoors—push-toys, wagons, tricycles, etc. If any children remain asleep, one staff member remains inside. Staff members take their morning breaks on rotation during this period.

Marsha awakens at 10:15 and is brought outside by Mrs. W., who then leaves for her break. Still rather sleepy, Marsha is placed in a playpen in the yard. She remains sluggish for a little while. Later Mrs. C. asks her if she would like to ride in the wagon. Marsha holds out her hands to be picked up; nuzzling her, Mrs. C. puts her in the wagon and pulls her around for a time.

As visitors leave, several of the children stand against the fence waving bye-bye. Aides take the hands of two who are standing by the fence not waving or talking, wave their hands and tell the babies to "Say bye-bye."

12:00 Most of the babies are asleep by this time. The staff members now eat lunch, clean up the room, do the laundry or fold diapers, and carry out other housekeeping tasks. Also, during this time, the lead teacher and the aides can discuss the progress of children in the program and make plans and assignments for the next day. On certain days, this time is used for staff-development sessions for teachers and aides from the entire Kramer preschool. On other days, aides in the Baby House carry out special teaching activities (mini-courses) in one of the other Kramer classrooms or assist one of the other teachers. Just as we encourage cross-age contacts for our children, so do we make it possible for our teachers to interact with children of all ages. We do not wish to have baby specialists, toddler specialists, fourth-grade specialists, etc. This time is also used by various staff members for record-keeping, administrative conferences, and family contacts.

The babies who are awake during this time usually play quietly, occasionally seeking attention, gesturing or signaling for help with a toy, etc. On most days, all the children who took morning naps also go down for an afternoon nap during this time, some falling asleep just before the regular afternoon nappers begin to waken. We encourage this kind of individual nap-schedule in the Baby House, as it makes easier the task of giving individual attention to each child. This time is very quiet and relaxed in the Baby House; no one gets upset if a staff member dozes off on the couch or in a rocker.

1:00 p.m. The action begins again, as the babies awaken between 1:00 and 2:00. We take care of individual needs, as each baby awakens and is brought into the living room of the Baby House. One might be still drowsy and like to lie on the couch for a few minutes before a favorite person or toy catches her eye and she moves to get it. Another likes to be rocked and to suck his thumb for ten minutes. During this time, a staff member might read a book to him and point to pictures. Also during this time we play little impersonal games with individual children—Peek-a-boo (or Peep-eye, as it is called in the South), So Big, "Where's your (eye, nose, foot, shoe, etc.)?" etc. Actually it is rare for all babies to be down at the same time for any length of time. We save the structured group activities until most or all of the babies are awake (9:00–10:00 in the morning). However, we carry out informal teaching activities with one or two children throughout the day.

2:00 With most of the babies awake, diapered, and reassured after their naps, we serve an afternoon snack of juice or fruit. Some of the younger children are given a bottle during this period. The "noise level" of the Baby House rises, and staff members carry out informal learning games as during the morning snack (stories, finger plays, songs, etc.). Long ago we learned that babies who at all other times are likely to be on the move will sit quietly for books and games during their snacks.

Toward the end of the snack period, Marsha calls out from the bedroom. Mrs. C. goes in to get her and brings her out, all smiles, to the snack area. As soon as Marsha is put down in the feeding table, she grabs an apple slice. Mrs. C. says, "Apple. Can you say apple?" Marsha smiles but does not try to repeat the sounds. After biting off the end of the slice of apple, she extends it to Mrs. C., who laughs and says, "Thank you, Marsha, but I've already had some apple."

2:30 This is the major cleanup period for the day. The elementary children not enrolled in after-school day care leave at 2:40, and one or two of the babies leave either at that time or shortly thereafter. Several of the older Kramer children routinely come to the Baby House at this time to help dress the babies or to play with them and read stories to them. A favorite activity is to put on a record and "dance" with one of the babies. At 2:45 Mrs. C., the first staff member on duty in the morning, goes home.

3:00 By this time, the elementary school has been dismissed. Several elementary children and slightly older preschool children who have younger siblings in the Baby House join them to await the arrival of their parents. Some of the older children of the aides also join the group to wait until their mothers get off work. We encourage this arrangement—not only because it keeps the children of the working mothers on our staff from being neglected while their mothers care for other children but also because it facilitates multi-age interaction, which we consider beneficial to our infants. It also creates a more homelike atmosphere, which adds zest to this time of day for the adults; i.e., they get to hear about things going on in their children's classrooms, have a chance to talk to older children, etc. This time of day is difficult for staff and babies alike, and the addition of older children provides "new blood" for a tired environment.

During this period, when it is difficult to carry out any formal teaching activities since children are coming and going and parents are arriving either in bunches or individually, staff members always try to be accessible for talks with parents. Many toys and games are made available to the children, and staff members monitor the play of both big and little children, making certain that the elementary children do not try to hold and handle the babies too much, too carelessly, or too roughly. If a child seems unable to become meaningfully occupied, a staff member will try to structure his or her play with a gentle suggestion or by pointedly placing a toy near the child. Staff members "talk" to the babies as they go about routine chores, and some especially appealing toys not made available during the day are put out during this period. Television is not used at all in the Baby House.

When the first group of elementary children spring in the door at 2:45, Marsha is still sitting in the feeding table munching on her apple slice. Alice, a fifth-grader who rides home with Marsha's mother, bounds over and says lovingly, "Hello, Marsha." Marsha extends her half-eaten apple slice and this time finds a willing taker. "Ooh, that's good," Alice comments as she eats the piece of apple. She turns and asks Mrs. W. if she can take Marsha out of the feeding table and get her ready to go home. Permission given, Alice lifts the baby out of the table, carries her over to the drawer marked with a red ball and Marsha's name, and takes out her clothes.

Once put down on the floor, Marsha crawls away and goes over to the slide. Mrs. W. comes over and says, "Let me change her diaper before you put her clothes on," and

carries Marsha to the changing table. Marsha is all smiles after her nap and apple and reaches playfully up for Mrs. W.'s face. Mrs. W. says playfully, "I'm going to get you" and tweaks Marsha's tummy as she takes off the wet diaper.

Alice comes over to watch, and Marsha turns and points to her and makes a sound which Alice interprets as her name. Mrs. W. returns Marsha to the floor by the slide, and Alice proceeds to dress her and talk to her. After that she puts on a record, and Marsha pulls to a standing position by the record player and "bounces" to the music. "Look at Marsha dance, Mrs. W.," Alice calls out excitedly. This activity is still going on when Marsha's mother opens the door and comes to get the girls.

Marsha drops to the floor, crawls to her mother who stoops down to pick her up and says, "Where's your coat, Marsha?" Alice runs to get it and then puts on her own coat. As the three walk out the door, Marsha's mother takes the baby's hand and says, "Wave bye-bye to Mrs. W., Marsha." Mrs. W. calls out, "See you tomorrow, Marsha."

Guiding Principles

Although variations are evident in the day-to-day events in the Baby House, the schedule is obviously not random. Rather, it has been adopted as a rough guideline for the day's activities, on the basis of certain principles we feel provide a sound basis for daily program-planning. We have resisted speaking of what we do as representing a particular curriculum, as that term is much too narrow when one considers the scope of activities that occur during an infant's day either at home or away from home. Rather we see our task as an attempt to design an environment that will enable a child's own developmental characteristics to unfold and will enable us to facilitate that unfolding.

The environment we attempt to create must be planned in relation to the needs of the little children who will grow and develop in it. Not all aspects of that environment can be regulated by the program planners, but certain components of it can be influenced in such a way as to create growth-fostering conditions for the children. Four aspects of the child-care environment that we can influence are the *interpersonal*, the *physical*, the *temporal*, and the *organizational* components.

By *interpersonal* we mean the full complex of person-to-person interactions between adults and children and between one child and another—the personality characteristics, teaching styles, caregiving patterns, reinforcement styles, and attitudes toward life of the persons responsible for the care of the children. *Physical* components refer to the quantity and pattern of space available for the program, and the equipment and materials available to the adults and children. *Temporal* components refer to the way time is used, and to the schedule arranged for the children and the adults. *Organizational* components refer to the policies and philosophy under which a given program is operated.

In Table 1 we have presented a schematic outline of ways we might try to structure these aspects of the child-care environment in relation to the needs of young children. The examples given represent a bare skeleton of the programmatic implications.

Reference to this kind of schematic representation of the total environment of an infant center will help program planners think in terms of broad guiding principles that should impact everything about the program, rather than focus merely on a narrow curriculum. It should help us think of ways to teach young children during mealtime, during a diapering session, or while putting on a coat, as well as during a formally structured teaching session.

After the broad guiding principles are articulated and understood, program planners must go on to develop specific teaching actions for those periods of the day when teacher-initiated activities are arranged for the children. Again, these should not be randomly chosen; nor should they be the same for all children in the program. They should be based upon carefully formulated objectives that represent developmental milestones in the life of an infant. For our infant-toddler program we have written approximately two hundred behaviorally oriented objectives, which can be classified into the following areas: personal-social behavior, gross motor behavior, perceptual-motor behavior, language, cognitive behavior, and self-help or "routine" behavior.

Complete achievement of these objectives does not come all at once for most infants, but is a gradual process. Thus we rate each child's performance in terms of whether the behavior is observed not at all, occasionally, frequently or consistently. Classification of the objectives into different categories is admittedly somewhat subjective, as most discrete behaviors have components of more than one category. For example, when one rolls a ball for a baby and says, "Go get the ball," is that activity gross-motor (moving to retrieve the ball), language (understanding the words), or personal-social (willingness to interact with the adult and follow instructions)? Obviously it has components of *all* these psychological processes, and the same could be said for most of the activities we engage in with infants and young children. We have attempted to categorize our objectives merely to highlight these diverse facets of infant development and to remind ourselves of the importance of directing our program activities into different areas of behavior, rather than concentrating all our energy in one area. Such a classification and establishment of objectives in all areas helps reduce any tendency to overemphasize the cognitive component in one's program.

All teachers and aides are encouraged to design teaching tasks that will help accomplish our objectives.[3] Table 2 contains a sample of objectives from our much longer list, together with one teaching activity designed to help infants achieve each objective. The objectives were adapted from developmental tests and from normative descriptions of infant behavior. They have been discussed with parents and are believed to represent a reasonable sample of what parents want to see their children accomplish during the early years of life. It should be stressed that our teaching repertoire will contain several activities for each objective. For the sake of brevity, however, only one for each objective is included in Table 2.

One should not draw the conclusion that we seek to achieve these objectives only through the structured teaching activities. Rather, we try to utilize all other aspects of the center environment to reinforce what is done through the teaching activities. For example, the diapering situation is a perfect place to help an infant achieve Objective 118 (knowing parts of the body). Similarly, large displays of children in posters around the room elicit interest in knowing labels for parts of the body. These are examples of what we meant by saying that we try to give attention to the total environment we are creating for the children and not merely to those activities that represent formal teaching.

One final comment about teaching styles: in general, we try to utilize techniques for strengthening desirable behaviors, such as *inherent reinforcement* (the child's own awareness that a problem has been solved, as when he climbs to the top of a series of steps or correctly replaces all pieces of a puzzle) and *social reinforcement* (praise and

[3]Readers wishing to have a complete list of our infant-toddler objectives may receive a copy by writing to the senior author at this address: College of Education, University of Arkansas at Little Rock, 33rd & University, Little Rock, AR 72204.

Table 1. A Conceptual Schema for Planning

CHILDREN'S NEEDS	PROGRAM		
Infant's need:	**Interpersonal**	**Physical**	
A safe healthful environment.	Staff trained to recognize signs of illness; able to administer first aid, comfort and care to a sick child; constant vigilance and supervision.	All dangerous and toxic substances out of reach; maintenance of hygienic conditions; arrangement of furniture so as to prevent accidents; provision of proper space and equipment for rest and sleep.	
Nutritious food and opportunities to learn to eat balanced meals.	Caregivers who make mealtime a pleasant experience, who set a good example of eating habits.	Space and equipment for storage, preparation, and serving of food and for adequate clean-up.	
A high frequency of adult contact with a relatively small number of loving adults.	Staff selected for qualities such as warmth toward and enjoyment of children; assignment of small groups of children to each caregiver for special attention; staff trained to understand the special needs of infants for adult attention.	Room for adults to interact with children both in groups and one-to-one; rocking chairs and couches allowing physical contact; toys that encourage interaction.	
Adults who respond emotionally, physically, verbally to children.	Caregivers trained to give modulated emotional responses to infants, to show their pleasure when infants act in ways that the culture approves or when they show developmental advances and to show disapproval when culturally disapproved behaviors persist; caregivers who consistently respond to infants' vocalizations; caregivers who touch, hold and cuddle infants and rock or move them in ways that provide kinesthetic stimulation.	Equipment and play materials that facilitate "togetherness."	
An emotional climate in which basic trust can develop.	Caregivers who respond to distress signals, who communicate positive expectancies ("I know you can do it") and help to build self-confidence; fidelity to promises.	Equipment and play materials that satisfy and challenge but do not overwhelm.	
Recognition and acceptance of individual differences.	Staff with no ethnic or racial prejudice, with the ability to love all children; awareness that not all children will learn and develop at the same rate; program planning geared to interests and abilities of all children in the group.	Room displays featuring children from different backgrounds, having different physical characteristics. Facilities for children with physical handicaps.	
Varied and patterned sensory and informational input in an appropriate intensity range.	Trained caregivers with knowledge of growth and development norms, with skills in conducting teaching-learning activities and in arranging learning environments; staff commitment to continuing self-development and a search for creative teaching materials and new ideas.	An array of teaching materials that permit the children to work toward skill development and problem-solving; an environment that is neither perceptually monotonous nor overstimulating.	

IMPLICATIONS

	Temporal	Organizational
	Provision for cycles of activity and rest.	Contact with public health agencies; arrangement with parents that help strengthen their commitment to obtaining immunizations and quality health care for their children; licensing laws that mandate health standards.
	Staff time for preparation and service of food and for postprandial clean-up; allowance of time on daily schedule for leisurely service of food.	Arrangements to secure low-cost food for eligible children from state and federal agencies; contact with nutrition specialists who can provide consultation on menus and specific nutritional problems; communication with parents designed to secure home support of nutritional policies.
	Work schedules that encourage stable adult-child contacts.	Large enough budget to support an adult-child ratio of at least 1:4 and to encourage long-term employment; a regular group of substitutes and parents and volunteers who can be called upon in an emergency.
	Opportunities for caregivers to rest so they can respond enthusiastically to infants when interacting with them.	Communications with parents about response styles of staff; interchanges between parents and staff about behaviors that effectively reinforce desirable reactions in children.
	A daily schedule that prevents an explosive build-up of any need—e.g., meals served on time, rest and activity opportunities provided, etc.	Home-center sharing of goals and child-rearing techniques.
	Extra-time allotments from staff to permit special work with handicapped or deprived children or to develop talents of children who show special promise.	Commitment to employ persons of different cultural and ethnic backgrounds; provision of rich and varied cultural experiences, which are given "status" to the children by the adults' participation in and enjoyment of them.
	Time on the daily schedule for both specifically planned teaching activities and child-selected activities.	Philosophical commitment to working toward a curriculum for the program that will help achieve developmental goals for the children.

CHILDREN'S NEEDS	PROGRAM		
Infant's need:	**Interpersonal**	**Physical**	
An optimal level and pattern of need gratification—not too much, too little, too immediate, to delayed.	Staff attuned to children's needs and committed to gratification of them, yet able to distinguish between situations in which a child should be allowed to struggle and those in which help should be given to avoid undue frustration or a tendency to give up; the ability to set up a creative mis-match between what a child can already do and what he will soon need to do.	Materials that allow gratification of basic physiological needs (such as the need of young infants to suck, the need for contact-comfort such as is afforded by blankets or other soft objects), that provide impetus for moving to a more mature form of need gratification (such as potty chairs or seats and cups or glasses that enable children to abandon infantile methods of elimination and food intake when sufficiently mature); materials that challenge (such as objects to climb, puzzles to solve) and yet gratify.	
Opportunities to explore the environment (personal and physical) without undue restriction.	Adults willing to allow children to explore, to try new things, to do some things at which they are not too skilled (as early self-feeding with spoon or fork) without getting upset when accidents occur; a non-punitive attitude and a willingness to allow curiosity to be expressed and manipulatory behavior occur.	An environment that permits and invites exploration but that provides natural limits (such as a fence) to behaviors that might lead to harm; toys that provide feedback and information to the child about properties of objects.	
Play and learning materials that facilitate the development and coordination of sensory-motor processes and unlimited opportunities to act upon these materials.	Staff willing to take a back seat to toys on occasions, allowing children to explore and experiment and use materials in both standard and nonstandard ways; awareness of the importance of a child's actually doing something with (acting upon) a toy in order for full assimilation of the meaning and use of the object to occur; willingness to make play materials out of simple objects and to permit child to manipulate common school or household objects.	Availability of appealing materials that permit the child to satisfy curiosity, to practice large muscle activities and finger and hand movements, to learn the properties and qualities of objects (hard, soft, sharp, big, little, etc.); space in which to manipulate these objects.	
Cumulative programing of experiences to provide an appropriate match for the child's current level of cognitive, social and emotional organization.	Knowledge of growth and development and of significant interaction between child's age and appropriate adult behavior—e.g., young infant's need for prompt response to crying whereas older infant might occasionally need to have attention withheld when crying occurs; awareness of level of complexity to which child can comfortably respond; development of curriculum in small units, with each step related to previous successes and difficulties; knowledge of limits of attention and interest in the choice of books and teaching activities; awareness of how much or how little frustration different children can tolerate.	Physical space and learning materials that stimulate but do not over stimulate, that challenge but do not frustrate.	
Acceptance of dependency needs and behavior with encouragement of gradually increasing independence.	Awareness of the importance of need gratification if child is to develop trust in the people in his environment and then move on to more mature level; acceptance of desires to be held, cuddled and loved; maintenance of close proximity to infants when new events are experienced, with gradual withdrawal as anxiety is reduced and competence gained.	Space and materials for rocking, holding, cuddling; safe play areas in which children can learn to rely on their own resources.	

IMPLICATIONS

	Temporal	Organizational
	A daily schedule permitting varied needs to be expressed, such as times for vigorous play and for quiet and relaxed times; opportunities for quiet and reflection as well as for vigor and ebullience; times for group contact and for solitude.	Formal endorsement of the concept that the infant program will be based on the needs and developmental characteristics of children and not on adult desires and standards that are insensitive to these needs and characteristics (such as parental demands that a six-month-old be fully toilet trained).
	Times when, either by subtle structuring or by withdrawal of attention, adults deliberately foster exploratory and manipulatory behavior.	Communication to parents that this is valued and important behavior and suggestions as to ways of encouraging it at home.
	Time in which to explore, to practice, to manipulate, to look for, to enjoy the available play and learning materials.	Sufficient operating budget to allow purchase of stimulating and appealing play and learning materials.
	Arrangement of the day in alternating cycles of intense activity and rest in recognition of the child's strength, endurance and attention span.	Communication to parents of sequenced planning, and occasional reminders of what parents should *not* expect of the infant program (e.g., children who will be "reading" at the age of 3).
	Time allowed in the assignment of tasks to permit gratification of early dependency needs.	Communication to staff and parents that such gratification is important and not likely to "spoil" or infantalize the children.

CHILDREN'S NEEDS	PROGRAM		
Infant's need:	**Interpersonal**	**Physical**	
Periodic checks on developmental progress.	Awareness of norms of development so as to be alert to deviations in rate and pattern: availability of special consultants to assist in the process.	Checklists or more comprehensive types of screening procedures, which can assure staff and parents of child's developmental progress; simple materials that can be used to carry out informal assessments.	
Contact with peers of similar and dissimilar ages who can provide models and permit reciprocal rehearsal of newly acquired skills.	Arrangements made for older children to participate with the infants on occasion.	Space for children of different ages, and enough variety in play materials that children of different ages will find interesting things to do.	
Overlap between and among the different environments in which they are expected to function.	Contacts between day care staff and parents, with two-way communication about activities and goals.	Space for interviews and discussions between parents and staff; facilities for observations by parents of activities in the center; space for festive and recreational functions.	
Contact with adults who find interaction with children satisfying and rewarding.	Staff selection that puts this quality at the top of the list of characteristics considered.		

attention). We use food as a reinforcement only when it can be said to be intrinsic to the situation—as, for example, when a child is working with cereal pieces in a perceptual-motor task. We respond enthusiastically both verbally and emotionally, and the responses of the Kramer babies would indicate that this type of reinforcement is entirely adequate to facilitate their development in our program.

Conclusions

In this paper we have attempted to give readers an idea of what a day is like in an infant day care program. In doing so we have been both specific and general; i.e., we have described the major events that occur during a "typical" day and have concretized that description with the actual events in the life of one child in the program during one particular day. In addition, we have attempted to relate our philosophy of how the total environment of an infant center should be conceptualized in order to meet the needs of young children. The schema we have outlined can be applied to infant care in any setting, and from it one can deduce the kinds of supports that would facilitate infant development in the home as well as in group or family day care. Finally, we have shared our version of some objectives we feel should be achieved in a quality infant program and have described one teaching activity that can be used to help achieve each of those objectives. It is important that both theoretical and practical considerations guide program development.

Infant care in non-home settings is a reality in American life. In our setting, we have found that it can be growth-fostering for the children, serviceable to their parents, and eminently satisfying to the staff who provide the care. We believe it is time that people stop maligning infant day care and begin to give more thought and attention to how it can be organized and operated so as to be a positive social force in American life.

IMPLICATIONS

	Temporal	Organizational
	Time (perhaps during naps) for discussing individual infants and the visible indices of developmental advance or potential problems.	Provision of training for staff in the detection of developmental deviations; contact with other agencies which allow for remediation of any problems detected by staff; communications with parents about each child's developmental progress.
	If such cross-age contacts are not possible as part of the regular daily schedule, some special times should be arranged when they can occur.	Willingness to allow for such contacts and to provide for the extra vigilance that may be required (e.g., as when an older pre-schooler tries to pick up and carry a baby, or as when a sick child comes to play with the infants).
	Time schedule for both formal and informal contacts with parents; time for field trips to meaningful community sites and for social occasions.	Constant and creative efforts to avoid isolation from family and community.
		Policies that allow people with the needed personal qualities to work with infants and young children without having to accept sub-standard wages and make personal sacrifices in order to do so; a national policy that recognizes the importance of infancy and early childhood and considers work with infants to be an important social role.

Suggested Readings

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Table 2. Sample of Behavioral Objectives for Infants and

Objectives and Category	Teaching Activity
48. Can pour from a small vessel into a larger one with accuracy (cup of water into a pan). [Perceptual-motor]	**Materials:** Cups or any cardboard or plastic containers such as cottage cheese or margarine tubs; beans, peas or rice. **Procedure:** Demonstrate how to pour ingredients from container to the other. Care should be taken that child not try to eat the beans or rice. When he pours the rice into the pan say, "Now the cup is empty." If he does not try to pour the rice back into the cup (which would be much more difficult), do this for him once or twice and say, "Now the cup is full and the pan is empty." Be sure to do this on a tray so that the rice can be saved and used again.
51. Demonstrates awareness of function of different items of clothing (hat on head, coat on arms, etc.). [Routine]	**Materials:** Dress-up clothes too large for children and thus easy to put on and a full-length mirror. **Procedure:** Show babies the hats, shoes, dresses, etc.; let each one choose an item. Direct conversation to different children in relation to what they are doing. "There's Mary in the mirror wearing a blue hat and black shoes"; "We wear a hat on our heads and shoes on our feet—show me your feet." Often the children will want to put items of clothing on the teacher, which adds to the fun and the opportunities for verbalization. Encourage those children who can say simple words to use the labels for the objects.
79. Puts small objects in and out of container in play. [Perceptual-motor]	**Materials:** Dry cereal that is rounded and easily grasped and baby food jars. **Procedure:** Give baby a jar and some cereal. Encourage her to drop a piece of cereal in the bottle and then tip it out. Say, "Put it in the bottle," or "Can you reach it with your finger?" "Maybe you had better tip it over to get it out (demonstrate)." After she has played with it a while, you might let baby eat the cereal (most of which will have been eaten during the activity anyway).
153. Can unscrew a jar top on a jar. [Perceptual-motor]	**Materials:** Rounded dry cereal and baby food jars. **Procedure:** Put some cereal in the jar and screw the lid on loosely. Show baby how you get it out and ask him if he can get the cereal. If he succeeds, do this several times, praising him after each success.
113. Pursues and retrieves a ball that rolls away. [Gross motor]	**Materials:** A ball of any size or any object that rolls. **Procedure:** Sit with child on floor. Roll ball toward child and then away from him. Say, "Look at the ball"; "Go get the ball"; "Bring me the ball."

Objectives and Category	Teaching Activity
34. Walks up and down stairs using railing or with no support. [Gross motor]	**Materials:** Small stair steps with at least three steps. The wooden rocking boat turned-over works well. **Procedure:** Hold child's hand when beginning this activity. Say "Now you go *up* the steps," or "Now you are going *down* the steps." You might also want to use the following little poem: Up, up, up the steps, Up the steps you go. Down, down, down the steps To the floor below.
151. Replaces nesting cups correctly. [Perceptual-motor]	**Materials:** Household measuring cups or commerical nesting sets. **Procedure:** Show baby a set of no more than 3 nesting cups at first (2 with the younger infants). Skip some in-between sizes for first trials. Demonstrate how they all go together, then place the cups in front of her and let her experiment. Occasionally repeat your demonstration and say, "Let's put the little one in one that is bigger, then let's put these in the biggest one of all." If child successfully completes the task, praise her and ask her what else she can do with the cups.
161. Works with paints and colors in free art situation.	**Materials:** Vaseline, cold cream, or thin mashed potatoes colored with food coloring. Have baby "paint" on a cookie sheet, oil cloth, or a washable table top. Regular finger paints may be used with older babies. **Procedure:** Help child to explore how things feel. Let her watch you smear the medium, make circles in it, etc. Then let child experiment in her own way. After she appears finished, you may lay a sheet of paper down on the production and lift it off the table top to be displayed in the room. Talk to child as she does this, labeling colors, movements, etc.
118. Imitates adult in touching eye, chin, nose, mouth, etc. [Cognitive and language]	**Materials:** None necessary, as adult can use her body. However, dolls and large paper dolls can also be used. **Procedure:** (If using doll), say "Where's the dolly's eye? Put your finger on the dolly's eye." If baby cannot do this, take her finger and touch the doll's eye. Then you might go to "Where's Mrs. _____'s eye?" and put baby's finger on your eye. Then the same thing can be done with the baby herself. When this game is played, one of the many teaching poems dealing with body parts might be said with illustrative gestures.

52

A General Model of Programs for Handicapped Infants and Their Families

Ernest A. Gotts

During the past decade, rapid expansion in human services provided by public and private agencies has given impetus to development of early intervention programs for the handicapped and potentially handicapped. Prior to the influx of large sums of public money, such programs were usually the result of the dedicated efforts of individuals or small community groups, who sometimes formed voluntary associations to provide services, and to support legislation for public funding. Program development then proceeded from trial-and-error methods; more recently, the U.S. Department of Health, Education, and Welfare, with the cooperation of state departments of education and local public schools, has played an active and decisive role.

Those interested in developing and operating programs for handicapped infants and their families can profit from knowledge of the basic issues involved in *any* human service program. Over time, program planners have had to confront a number of key questions. For specific situations, formulation of these questions may vary, but the basic issues remain essentially the same:

1. What needs exist in the community for a service of the type intended? What is the extent of these needs?
2. How aware of the needs are existing agencies? What steps are they taking to respond?
3. If a service can be provided, how can those individuals who might best profit from it be found?
4. If a service is established under existing legal provisions, how can eligibility definitions remain flexible enough to ensure that those most needing it can receive it as conditions and service-populations change?
5. How can we draw on expertise within and outside the service in order to provide a diagnostic and treatment-planning process that gives enough accurate, detailed information on which to base the broad outlines of the treatment plan?
6. What alternative forms can the service program take? How will ongoing services be coordinated with other treatment services outside the program?
7. Once a placement is achieved, how will ongoing assessment be used to: a) challenge existing plans, b) collect data for project evaluation, c) fine-tune the treatment plan; and d) how shall outside expertise be used in this process?
8. How long shall we offer the service? Are there cut-off points? How do clients flow to receiving programs or back to the general community?

The pioneers' experiences enable us to identify some major components of a successful program. Analyzing these components provides a basis for systematic planning. Once we develop goals and objectives to cover the essential tasks, we can formulate

appropriate role and job descriptions. Such a framework can help us plan a project's evaluation design and develop the needed administrative structure. This framework can further provide an organized means of orienting new staff and the general public to the service system.

Development of Programs for Handicapped Infants

Feeling that a need exists, interested individuals and organizations first must confirm its nature and extent by means of a systematic community assessment. If they decide the need is great enough, they next must solicit community support substantial enough to implement a program and create an organizational structure.

To assess interest and potential support, an early step toward implementation involves contacting referral-sources who may know of instances in which services are needed but not presently available. Such target groups include medical personnel in community practice, hospital personnel, various helping professionals in the community, state and local agencies, and private charitable and voluntary agencies. A second phase frequently includes a direct approach toward the potential consumers of the service—conducting public-awareness campaigns through the media or mailed- or door-to-door survey, and seeking self-referrals or referrals through existing channels. Care should be taken to collect and organize data that will accurately reveal the nature and extent of needs in the community.

Systematic community assessment is especially important when funded by outside means. During this assessment, community personnel must begin to assay community needs and resources, develop the components of the service system, and find interested local supporters. If this local base is not sufficiently developed, the service may disappear when external funding stops.

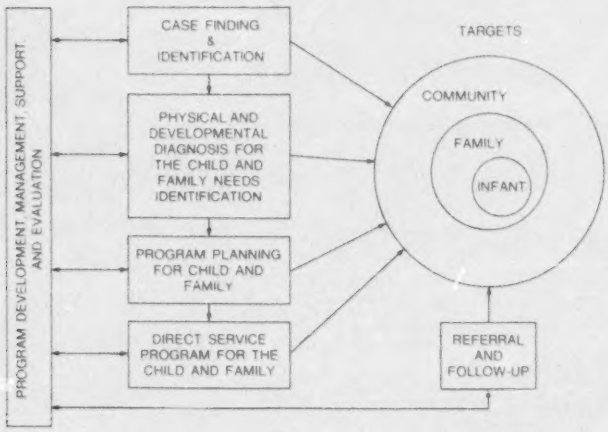
Once the decision has been made that a particular service program is needed in the community and after the institutional framework and basic funding for the service have been developed, the next tasks are to decide which specific services will be offered, what their limits will be, and to whom they will be offered. After these questions have been answered, the program can proceed to publicize the availability of its services. Common errors at this point include failures to clearly define the target population and the extent to which needs may be met, and to identify those needs that *cannot* be served. When referrals are made that the program does not accept, the referring agency or professional person may feel irritated or frustrated. And families may feel abandoned when they do not receive services that they assumed would be provided. Clear communication about such issues is a necessity.

BASIC COMPONENTS OF HUMAN SERVICE PROGRAMS

Figure 1 presents a model of the components of a program and the relationships of these components to the targets—the handicapped child, the family, and the community.

In Figure 1 the concentric circles represent the targets of the program—the *child* within his *family*, within the *community* of residence. Along the left margin a box represents the leadership and program-facilitation function; this is the Program Development, Management, Support, and Evaluation component. As shown, this component must be in direct communication with every other aspect of the work to be done. The boxes at the center of the figure represent the major areas of work: finding children, qualifying them for services, diagnosing individual child needs and identifying family needs, planning for services, and delivering direct services.

Figure 1
GENERAL MODEL FOR A COMPREHENSIVE INFANT SERVICE PROGRAM SYSTEM


PROGRAM DEVELOPMENT, MANAGEMENT, SUPPORT AND EVALUATION
CASE FINDING & IDENTIFICATION
PHYSICAL AND DEVELOPMENTAL DIAGNOSIS FOR THE CHILD AND FAMILY NEEDS IDENTIFICATION
PROGRAM PLANNING FOR CHILD AND FAMILY
DIRECT SERVICE PROGRAM FOR THE CHILD AND FAMILY
TARGETS
COMMUNITY
FAMILY
INFANT
REFERRAL AND FOLLOW-UP

Directly beneath the targets is a box that represents Referral and Follow-up. This component involves passing the child along to a receiving service or returning him to the mainstream once the program has done all it can for the child or is no longer needed. Included is monitoring of the child in the new setting as well as training and technical assistance he would require in a receiving program. The component establishes long-term contact so that the program's success can eventually be evaluated.

Let us now examine these components in greater detail.

The Leadership Function

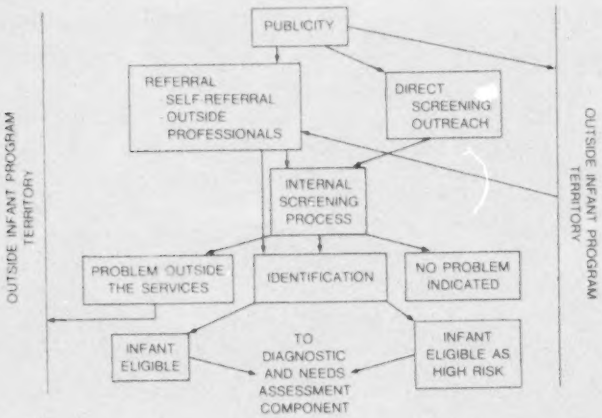
Leadership in the development of programs for handicapped infants and their families is a vital challenge. Responsibilities for this function may spread to several individuals. Usually, however, one person (the leader or director) assumes primary responsibility and then delegates aspects of the function to others who have the necessary skills, information and interest. The leadership (whether one person or several) staffs a Program Development, Management, Support, and Evaluation component, which must interact constantly with the other components in order to monitor the service delivery system, assure the availability of necessary resources, and determine that each component is producing the expected outcomes. Other concerns of the leadership include: staffing the program; budgeting and managing funds; keeping records and reporting; developing good public relations; providing inservice training and other staff development strategies; acquiring and maintaining facilities, equipment, and supplies.

Finding and Identifying Cases

This component represents the area of work related to locating handicapped infants and to determining that they are eligible for the service program. As shown in Figure 2, publicity about the available services results in referrals by parents as well as by professionals outside the program. A screening outreach-campaign may locate still other potential cases. In both instances, cases may be screened within the program to reduce the number of false identifications and the expense of additional, more refined evaluations. That is, a number of cases may be clearly excluded as inappropriate for the program. Other cases may require further study. A few may proceed to third and

fourth levels of screening. The further the case moves through the process, the greater the cost to the program and/or the infant's family.

Figure 2
CASE FINDING AND IDENTIFICATION COMPONENT



In some programs, an eligible child may be identified *directly* from outside referral, gross screening, or door-to-door search. Such a procedure entails the risk of moving a child forward to in-depth diagnosis at great expenditure of program resources (and family resources) and at times considerable stress to the child, only to determine later that the infant is not really eligible for the program. Nevertheless moving directly to identification is appropriate in many cases and individual programs must have clear guidelines for this.

Figure 3 shows how the two major strategies of case-finding—screening and referral—contribute to the major decision: Is the infant eligible for further service?

Figure 3
CASE FINDING STRATEGIES

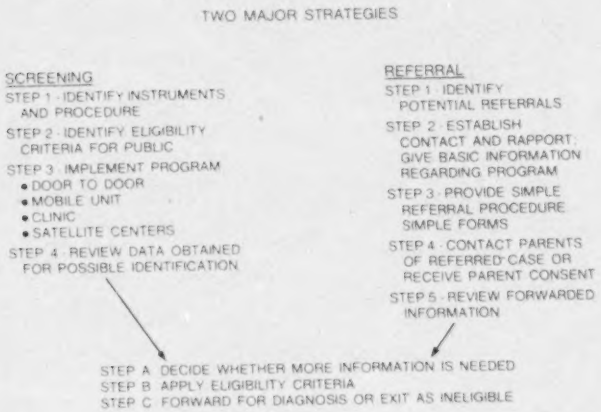
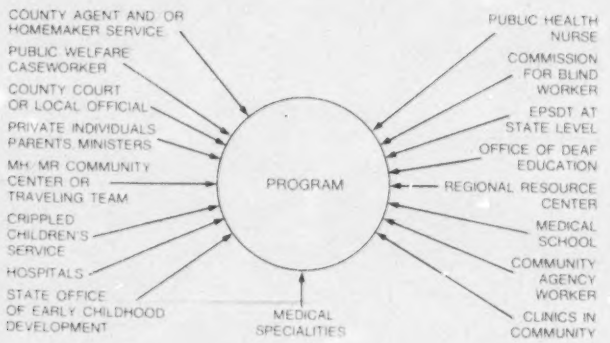

TWO MAJOR STRATEGIES
SCREENING
STEP 1 - IDENTIFY INSTRUMENTS AND PROCEDURE
STEP 2 - IDENTIFY ELIGIBILITY CRITERIA FOR PUBLIC
STEP 3 - IMPLEMENT PROGRAM
• DOOR TO DOOR
• MOBILE UNIT
• CLINIC
• SATELLITE CENTERS
STEP 4 - REVIEW DATA OBTAINED FOR POSSIBLE IDENTIFICATION
REFERRAL
STEP 1 - IDENTIFY POTENTIAL REFERRALS
STEP 2 - ESTABLISH CONTACT AND RAPPORT; GIVE BASIC INFORMATION REGARDING PROGRAM
STEP 3 - PROVIDE SIMPLE REFERRAL PROCEDURE SIMPLE FORMS
STEP 4 - CONTACT PARENTS OF REFERRED CASE OR RECEIVE PARENT CONSENT
STEP 5 - REVIEW FORWARDED INFORMATION
STEP A DECIDE WHETHER MORE INFORMATION IS NEEDED
STEP B APPLY ELIGIBILITY CRITERIA
STEP C FORWARD FOR DIAGNOSIS OR EXIT AS INELIGIBLE

Figure 4 indicates a number of possible referral sources for a handicapped-infants program.

Figure 4
POTENTIAL REFERRAL SOURCES



State or other legal eligibility requirements should be analyzed to determine what conditions are sufficient to qualify the child for a program. Various available measures suitable for screening should be reviewed. A battery of appropriate screening measures may then be formulated. If other uses are to be made of screening data, measures should be added to the battery that provide the necessary information for these uses.

The plan for using the screening battery may then be formulated. Step-by-step descriptions should be written, indicating the objectives for the screening process: the *who, where, when, how,* and *why* concerning screening. Many plans will include sequential use of the various measures of the battery. If, for example, after use of a gross screening measure, a child seems to be auditorially impaired, then a very sophisticated technique may be called for to confirm the problem and perhaps to identify its nature and extent.

Once all steps of the screening procedure have been completed, data must be compiled and summarized. Eligibility criteria should then be applied to determine if the child may be taken into the program. The decision may be that the child is eligible, not eligible, or—in rare cases—in need of more study. Throughout the screening procedures the leadership provides staff, support, resources, and evaluation services so that the procedure may be developed, maintained and improved.

In summary, the first step of the sequential screening process should screen out most of the obviously noneligible children (e.g., overage, not living in service area, already receiving service elsewhere) while identifying very few children as definitely eligible. As finer measurements and more stringent criteria are applied, most of the other noneligibles are screened out while others are identified as definitely eligible. Finally the staff confirms high-risk situations and decides to proceed to formal diagnosis and program admission.

Diagnosis Phase

The term "diagnosis" is used here to refer to an interdisciplinary analysis of the infant's problem(s) and assets. The result of such an analysis should be summarized by a team of individuals so that the broad outlines of a treatment plan can be formulated. Major recommendations and the suggested developmental program in written form are essential parts of a sound diagnosis: an assessment of the family's need and recommenda-

tions for working with the family should also be included. Figure 5 describes the diagnostic phase.

Figure 5
PHYSICAL AND DEVELOPMENTAL DIAGNOSIS OF THE CHILD: FAMILY NEEDS ASSESSMENT

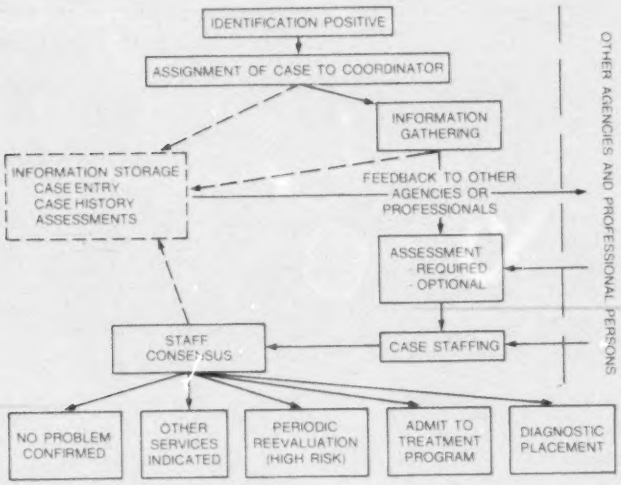


Figure 6 indicates areas of study to be included in a comprehensive physical (medical) and developmental diagnosis. The emphasis here is on the word *comprehensive*, since isolated services are not likely to minimize the effect of the various handicapping disabilities or disorders on the infant.

Figure 6
COMPREHENSIVE PHYSICAL AND DEVELOPMENTAL DIAGNOSIS: AREAS OF STUDY

58 An infant program may collect under its program roof a great many experts from a wide range of disciplines. However, it is unlikely that any program will have all necessary expertise on hand. Outside sources in the community, state, region or even at the national level may be required in a number of instances.

Figure 7
AREAS OF EXPERTISE
FOR INPUT AND COORDINATION
IN DIAGNOSTIC PROCESS

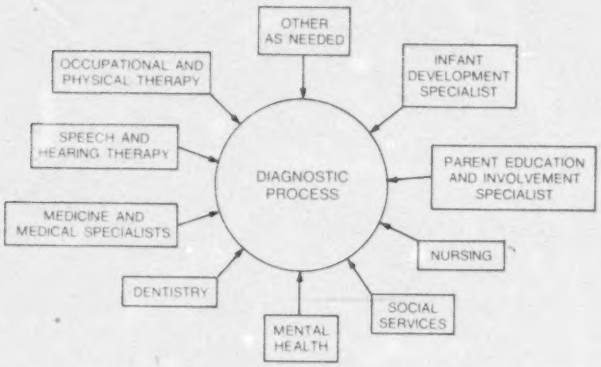


Figure 7 indicates a number of input areas and targets for coordination in the diagnostic effort. A major task is to develop a decision-process for determining what to request in the way of diagnostic expertise, and when. As a minimum, input should include both medical and developmental areas. That is, infant education specialists should not take on the role of determining what medically related procedures are required. By the same token, medical specialists should neither specify the behavioral analyses to be made nor the procedures and measures for making the analyses. The chances of requesting the most appropriate and essential diagnostic procedures and measures are improved when both medical and developmental specialists are involved in the decision.

Figure 8 indicates some major areas for consideration in family-needs assessment. Relatively less expertise and instrumentation is available for this area than for evaluating the infant's needs. By the same token, the methods of assessing needs are less formal, though one need not be unfocused or unclear about what should be assessed as a minimum.

Program Planning

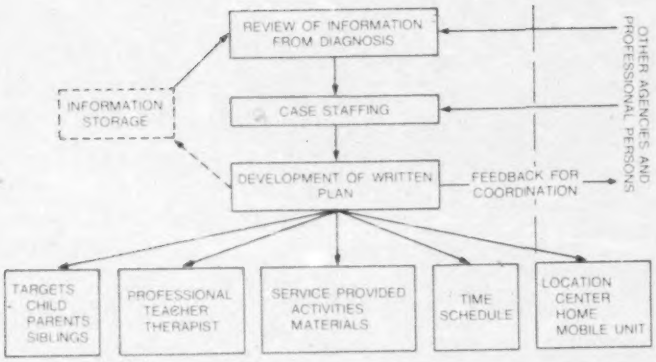
A frequent criticism in the past has been that although many programs for handicapped children have been strong in seeking out the causes, nature, extent and implications of various problems, they have often failed to develop very specific plans for dealing with the problems. This situation is attested to by the existence of clinics, developmental centers, and the like that specialize in diagnosis but leave treatment services to others. What is needed is interaction of the diagnostic process and the treatment service. Figure 9 indicates the flow of the planning process. The written plan specifies the targets, service personnel, and arrangements—timing and location of services provided. If the plan fails to deal with these areas, then it is probably not clear and specific enough to guide service efforts. The planning effort may be continuous with that of diagnosis; it may include outside personnel as well as staff. Although to think of diagnosis and program planning as separate program components is artificial, it is helpful to do so for the sake of clarity. At this state of individual program-

planning, a workable plan comes into being. The recommendations developed as a part of the diagnosis are ideals. The individual plan must be realistic in terms of the program resources and stage of development.

Figure 8
FAMILY-NEEDS IDENTIFICATION: AREAS OF STUDY

FAMILY COMPOSITION
• STRUCTURE
• ROLES
• VALUES
DAILY LIVING ROUTINES AND CHILD'S IMPACT ON THESE
• WORK
• PLAY
SKILLS FOR BEHAVIOR MANAGEMENT
NEED FOR REDIRECTION AND/OR REFOCUS OF FEELINGS
• GRIEVING SYNDROME
• SOCIAL CONTACT
• SUCCESS IN HANDLING PROBLEMS
• POSITIVE SELF ESTEEM
• SIBLINGS
SKILLS FOR DAILY LIVING AND CARE PROBLEMS RELATED TO HANDICAP
FAMILY
SKILLS FOR OBSERVING THE CHILD'S BEHAVIOR AND HIS PROGRESS
INFORMATION RELATED TO
• WHAT TO EXPECT IN FUTURE SERVICE
• GENETIC COUNSELING
• OTHER RELATED SERVICES
• STIMULATION POTENTIAL OF MATERIALS AND ACTIVITIES
SKILLS FOR IMPLEMENTING DEVELOPMENTAL PROGRAM
SKILLS IN FOLLOW THROUGH ON THERAPIES
INFORMATION RELATED TO
• CAUSE OF HANDICAPPING CONDITION
• SERVICES AVAILABLE
• NORMAL DEVELOPMENT
• IMPLICATIONS OF HANDICAPPING CONDITION

Figure 9
PROGRAM PLANNING



Direct Services

Once plans have been developed for assistance to infants and to families, service-provision can proceed. Coordination within the program and with outside efforts is essential. Comprehensive written plans specify objectives for working with the child and with the family. Data regarding the attainment of goals and objectives is both stored in a data bank and used in periodic reviews of the services. Parents as well as professionals should regularly review plans for the infant and the family to determine the achievement of the objectives and the need for revising them. The review may re-

sult in a decision to terminate the program or to revise the plans. At all times it is essential to include outside expertise in the periodic review and to provide written feedback to other agencies concerning updating of the program plan. Any revisions made in outside agency treatment plans also should be fed into the program's periodic review-process.

Referral and Follow-Through

When a child has attained the maximum benefits possible from the program or becomes too old to continue in it, he should be referred to a receiving service or be returned to the mainstream of the community. The program's responsibility does not cease with the acceptance of a referral by another agency. Rather, supportive services may be offered directly to the child and family during the transition period. Training and technical assistance may be given to the receiving agency. The program will need to maintain contact to monitor the child's coping in the new setting. Arrangements should be made for long-term data collection on outcomes for the purpose of eventful evaluation of the infant program's success.

SUMMARY

We have reviewed and discussed the components of a model program for handicapped children and their families. The framework presented can prove useful in a number of ways, helping to—

1. analyze the soundness of a project's basic plan.
2. identify areas of the plan that need to be amplified and/or clarified.
3. establish management procedures for monitoring the flow of individuals through the program.
4. guide staff discussions to conclusions and produce results.

Let us now summarize implications of the model in terms of criteria for judging the viability and probable success of a project:

1. Program services are based on real, identified needs of the community.
2. Project staff develop realistic goals and have an estimate of how long it will take to establish a sound program.
3. Sound management and support systems are in place. Process and product are assessed. Staff development is pursued.
4. Program components are carefully planned and are related to each other functionally. The view of the program is comprehensive—not narrowly focused. Staff responsibilities are clear and fulfilled.
5. Staff composition and experience level are varied. Roles are differentiated. Various disciplines and different styles are represented.
6. The program philosophy is clear about not solving problems for people, but enabling people to solve their own problems. The amount of assistance provided is the minimum necessary to help the infant and the family begin to change.
7. The program does not duplicate or compete with existing services. Instead, it evidences a sincere effort to cooperate and coordinate services within and outside of the program.

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At Risk!

Perhaps the most heartening outcome of the "intervention decade" (1965–1975) in American childrearing has been our growing realization of the enormous potential influence that adults have on the development of the infant and young child. For over 90 percent of the mentally retarded in the United States, causes of their disability are unknown; for 99 percent of the "mildly retarded" (50–75 IQ), no neurological impairments are discernible. These facts suggest that conditions of environment, not organic causes, are probably responsible for most of the depressed intellectual functioning in our society and that we can do a great deal to improve the situation.

Potentially, every human organism is "at risk" (i.e., has greater than normal likelihood for developmental delay) as early as conception, when a multitude of health and environmental factors begin influencing the development of the child. A malnourished or diseased mother passes on her deficiencies in one or more forms to her unborn child, who begins his extrauterine life with handicaps that might have been prevented by proper prenatal care. The growing tendency to push intervention back from preschool to infancy takes on greater urgency when we recognize that prevention is vastly superior (economically and developmentally) to remediation. To be most effective, intervention must begin with young people by the time they are able to conceive and bear children. For many children birth is too late to prevent permanent handicaps.

Sources of Risk

The sources of greater-than-normal risk are varied and complex. Socioeconomic status, including a large number of variables, is perhaps the most often mentioned factor related to high risk. Socioeconomic status does powerfully affect child development, but poverty is *not analogous* to stimulus-deprivation or to handicapping conditions. Although high risk children tend to be concentrated in poverty populations (over 75 percent of the mentally retarded nationwide come from poverty areas), they are present in every socioeconomic group.

Recent statistics for one state[1] illustrate the growth in general social variables that have greater influences in creating high risk conditions than any single neonatal event. In Texas alone (population 12,000,000), one out of every five persons is poor (unable to sustain oneself economically). Divorces there have increased 28 percent between 1968 and 1972. During this same four-year period the number of illegitimate births

[1]Texas Office of Early Childhood Development, *Forty-Six Thi[illegible] You Should Know About Texas Children: The Darker Side of Childhood* (Austin, 1974).

increased by 25 percent. The number of teenagers marrying is increasing at a rate four times that of all other age-groups in Texas. The number of babies born to teenage mothers is increasing at a rate five times that of all births. Young mothers tend to expect too much of their babies—for example, expecting them to be bowel-trained at six and one-half months, a biological impossibility. When such parental expectations are not met, infants face a high risk of being battered or abused. Approximately 4,000 child abuse cases were confirmed in Texas in 1974. Nationwide, the illegitimate child is almost twice as likely to die during infancy as the legitimate child. In addition to illegitimacy and teenage maternity, premature birth (one of twelve births, nationwide) is a major high risk variable.

Examination of prematurity alone reveals a startling array of specific variables that we should consider in designing intervention programs of prevention and remediation. Prematurity and low birth-weight are not synonymous. The term "premature" is now applied to those born less than thirty-seven weeks after the first day of the last menstrual period. From both biological and social perspectives the premature infant is at greater risk than the full-term infant. He (she) is at risk for most of the conditions potentially injurious to the central nervous system. He is at *high* risk for brain injury and mental retardation, and later related deficiencies in language and motor development. A premature infant also has difficulty ingesting and assimilating nutrients essential during the period of rapid brain growth. Animal studies show that extremely brief periods (two days) of undernutrition can result in impaired brain growth. Improved medical care is leading to the survival in increasing numbers of premature infants, and adding urgency to the examination of infant interaction with the early social and inanimate environment.

The behavioral consequences of interaction between the infant and his extrauterine environment begin at birth whether the infant is premature or full-term. The noise level in incubators and the degree of touching, holding, talking by adults—all appear to influence development during the early period. Risk factors are further multiplied during the early childhood years as a result of the increased numbers of working mothers and the paucity of high quality day care environments. Ultimately these concerns are problems for legislators, who hold the real power to unleash energy (and money) for the research and development required to establish and maintain a wide range of caretaking arrangements designed to care for child and family needs.

Plasticity: Asset or Liability?

Research of the 1960s established infancy and early childhood as optimum times for intervention. The thesis was that the brain is most plastic during these periods, growing most rapidly and being most influenced by conditions of environmental stimulation. New evidence does not contradict this generalized view of infant plasticity. The question is no longer whether early experience with caregivers influences the infant's cognitive (and affective) development. Today the issues are: how, in what ways, with what relative effectiveness, for what age infants, and over what time spans? While the evidence for early intervention per se is compelling, questions of the nature and intensity of intervention are still very much open issues.

The plasticity of the infant brain, which presumably accounts for much of the effect of early experience, does not appear to be an advantage in all situations. Similar damage to the brains of infant and adult animals does not result in similar consequences. A relatively small amount of damage to the infant brain results in a reduction in volume of the entire hemisphere of over 30 percent, while similar damage to the adult brain results in a reduction of only 20 to 25 percent. Furthermore, in certain types of brain

damage, intense rest produces far fewer symptoms at maturity than does an intense exercise program (Isaacson).

Animal studies also indicate that early learning may limit potential to learn later. However, animal brains are not human brains; and implications for humans must await human experimentation. Apparently there can be *too much* stimulation, or *too little*. Most biological phenomena react to stimulation in an inverted U-shaped curve (Lipton). Lipton believes that *no* stimulation at all leads to *no* elaboration of neurological structure and processes, while pushing brain maturation (overstimulation) leads to overdevelopment and later deficits in behavior. Yet recent evidence (Purpura[2]) from human subjects who died several weeks after premature birth reveal remarkably abnormal brain development, apparently resulting from a few weeks of survival in an isolet. Living in an "artificial space station" does not stop development; the result rather is an extraoruinary amount of *extra* development, suggestive of early fixation in the absence of appropriate stimulation. The behavioral implications of such development are not yet known.

Individual differences are at work even during infancy. The more passive infant is probably most handicapped by an unstimulating environment. The more active, responsive baby may have difficulty experiencing a highly stimulating environment. Such behavior differences in infants have decided influence on their growth, since caretakers tend to be influenced by the activity level of the infant.

The Infant Socializes the Mother into Motherhood

Intuition and common sense say that the mother is the major shaping force in the infant's life, caring for his needs, coddling, stimulating, protecting, loving. It is now clear that another important shaping process begins at birth—the baby socializes the mother into motherhood! The infant and the mother—indeed, the infant and the *family*—make mutual adaptations. The child contributes to his own experience and growth through promoting interactions with his caregivers. By looking, smiling and crying, he effectively captures attention and initiates interactions, which in turn have sustained effects on the caregivers.

The breakdown of interaction between mother and child or the existence of continuing positive interaction results in the creation of self-reinforcing consequences (Kass et al.). The mother who withdraws from a disruptive child or who reacts punitively tends to aggravate his disturbances, leading her to further withdrawal. Successful interactions result from caregiver responses to specific cognitive and developmental needs (strengths and weaknesses) of the infant. As the child experiences success he translates it into reinforcement for the mother, who in turn engages in more positive behaviors. Thus the infant not only initiates interactions (as many as four out of five), but actually shapes mothering behavior.

Out of the Institution

Following a decade of working with institutionally retarded children, one research team (Bricker and Bricker) concluded that they were not studying developmental processes of children but were reacting to the debilitating consequences of institutionalized living. Shifting the setting for training from the institution to the home revealed that procedures that seemed effective in the institution did not work in the home. For example, behaviorally oriented extrinsic-reinforcement procedures restricted rather

[2]Dominick P. Purpura, M.D. (Albert Einstein College of Medicine). Conference discussant.

than enhanced the development of children. Contingencies of reinforcement work well with infants; but during the toddler period, responses are associated with previously experienced reinforcers and "interesting consequences of action." Homes are rich with these reinforcers—people, clothes, dolls, spoons, tickles on the tummy.

State legislation clearly sets out the responsibility to educate *all* children. The limited programs of the past placed the handicapped into special classrooms, but many of these children are now being integrated into the mainstream of schooling. This move toward "mainstreaming" is evidenced by integration of 10 percent handicapped into Head Start classrooms and efforts by some states to reduce the number of institutions and increase the number of group homes within the community. In addition, mildly handicapped children are being moved out of special classrooms into regular classrooms in public schools.

Success of such integration requires changes in the practices and attitudes of teachers. They will need training and continuing assistance in meeting special needs of handicapped children, but precious few programs have a success record from which guidelines may be gained. The typical experimental program is small-scale, involving far more resource people with more appropriate training and leadership than are typically available in a public-school context. This very lack of resource and training has been a major reason for shifting handicapped children into special classrooms in the first place. It does not seem reasonable to assume that the schools will be willing or prepared to reverse this process unless teachers are helped to cope with the needs associated with integration.

Intervention in Family and School

In experimental programs recently reported (e.g., see Conference papers by Beckwith, Hayden, et al., Shearer and Shearer, Kass et al., Barrera et al., Hart and Risley, Bricker et al., Hayden and Haring), the training context is either exclusively home-oriented, using trained professional or paraprofessional home teachers, or—more often—a combination of home and school orientation. In one program (Baker and Heifetz), families are trained in a residence camp. A family orientation has numerous strengths:

1. The child engages in interaction with the total family, not just the mother. One-to-one interaction between the home teacher, the family member and the child provides for individualized instruction for each.

2. Members of the family reinforce one another in caregiving attitudes and practices. The child is reinforced by his natural reinforcing agents, his parents.

3. To be successful, the parent and family must recognize and accept the child's problems. One mother put it this way: "Hearing the Doctor say, 'Yep, a typical mongoloid,' is the roughest news a parent can hear. He said, 'Louise, you take that baby home and love him just like the rest'." Louise was more fortunate than many parents, for she was later able to state, "Being with William is the best thing that ever happened to my other children."

4. Helping the mother or other family member to learn positive caretaking practice is perhaps less important for what it does for the child than what it does for the parent. The training of the parents often generalizes to new behaviors.

5. The family is the most economical and potentially successful setting for intervention. Skills required for working with high risk children range from general to specialized. Most of these skills can be learned by parents and applied in the everyday course of natural family living. Furthermore, most of the needed learning materials may be found in the home.

6. Institutionalization often compounds existing problems by divorcing the child from his strongest emotional ties and his most diverse models. Home-centered training

occurs in the natural environment, thus avoiding the problem of transfer from school to home.

Each project employs unique approaches, but the operational programs have a great deal in common. Typically the intervention project is a mechanism for bringing parents together to help them understand and stimulate their child's development. It can also serve as a research laboratory for gaining new knowledge, as a training site for teachers, and as a sounding board for educational policy.

We find a variety of terms used to describe the instructional programs—for example, "precision teaching" (Shearer and Shearer), "non-categorical education" (Bricker and Bricker), "incidental teaching" (Hart and Risley)—but the instruction in all is individualized, and all appear to be in the process of transcending the tendency to fix professional workers and skills to be developed into narrowly circumscribed specific disability categories. Typically children are evaluated during initial contacts on the basis of common developmental dimensions—gross and fine motor, perceptual-cognitive, language, and personal-social. In the more comprehensive setting of family-community oriented programs, additional areas are assessed: for example, the nature of parent-child interaction and of the family and home resources. Most programs base subsequent treatment on areas of greatest difficulty in a combined clinic and home treatment program. Kass and Parmalee believe that assessment of strengths is as important as assessment of deficits and suggest that intervention is effective only when strengths can be utilized in working on weaknesses.

Unfortunately, assessment instruments and methods are still in a primitive state. Except for the prediction of achievement, IQ tests probably should not be used—definitely not to classify a child or attach a label. Most of the reported projects are building comprehensive developmental instruments, which yield specific descriptions of behaviors to be used as bases for intervention. Commonly, developmental sequences are constructed from the writings of Piaget, and procedures for intervention often use operant conditioning methods based on Skinner's work.

Prescriptive intervention follows diagnosis of the child's assets and needs. Participation of the parents in specific programming may not be successful until the family recognizes and accepts the child's problems. First visits to households sometimes find the family in a state of mourning over the handicapped child. Initial effort of home teachers may involve such simple tasks as teaching how to hold the baby. As rapport and confidence are built, the parents can be helped to work on specific skills.

Despite the rich array of intervention programs, no single approach to skills development has emerged superior to others. Researchers are still unsure about persisting effects or the effects of long-term intervention. Short-term effects are positive and significant. One estimate is that educators and related professionals, with adequate support, could reduce the number of mentally retarded Americans in half by the turn of this century. From either biological or cultural perspectives, a decision not to intervene certainly cannot be founded on the careless claim that intervention makes no difference. We need coordinated efforts of local, state and national groups to respond conclusively to these issues and, consequently, to reduce the risk of being born and growing up in America.

The primary sources for this paper are documents and deliberations of the National Conference on Early Intervention with High Risk Infants and Young Children, sponsored by the President's Committee on Mental Retardation in cooperation with the Association for Childhood Education International and six agencies of the Department of Health, Education, and Welfare, held at the University of North Carolina at Chapel Hill, May 5-8, 1974. The brief content of this paper provides only a generalized perspective of the extraordinary quality and range of the Conference deliberations.

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Baker, Bruce L. (Harvard University), & Louis J. Heifetz (Yale University). The READ Project: Teaching Manuals for Parents of Retarded Children.

Barnhart, Kathryn E. (University of Washington). State of the Art—Nursing: Recommendations.

Barrera, Maria E.C., et al. (University of North Carolina at Chapel Hill). Early Intervention with Biologically Handicapped Infants and Young Children: A Preliminary Study Using Multiple Baseline Procedures.

Beckwith, Leila (University of California at Los Angeles). Caregiver-Infant Interaction and the Development of the Risk Infant.

Bricker, William A., & Diane D. Bricker et al. (George Peabody College). The Infant, Toddler and Preschool Research and Intervention Project.

Butterfield, Earl C., & George F. Cairns (University of Kansas). The Infant's Auditory Environment.

Dennenberg, Victor H., & Evelyn B. Thomas (University of Connecticut). From Animal to Infant Research.

Gallagher, James J., et al. (University of North Carolina at Chapel Hill). The Use of Longitudinal Research in the Study of Child Development.

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Lipton, Morris A. (University of North Carolina at Chapel Hill). Early Experience and Plasticity of the Central Nervous System.

Meier, John (University of Colorado). Screening and Assessment of Young Children at Developmental Risk.

Ramey, Craig T., et al. (University of North Carolina at Chapel Hill). The Carolina Abecedarian Project: A Longitudinal and Multidisciplinary Approach to the Prevention of Developmental Retardation.

Ross, Leonard E., & Lewis A. Leavitt (University of Wisconsin at Madison). Process Oriented Reserach and the Assessment and Amelioration of Intellectual Deficit.

Shearer, David E., & Marsha S. Shearer (Cooperative Educational Service Agency #12, Portage, WI). The Portage Project: A Model for Early Childhood Intervention.

[3]These papers were prepared for the North Carolina Conference. They have since been published in a comprehensive volume, *Intervention Strategies for High Risk Infants and Young Children*, edited by Theodore D. Tjossem (Baltimore, MD: University Park Press, 1976).

Selected Information on Practical Resources for Infancy and Infancy Programs: An Abstract Bibliography

Proliferation of day care and infant development programs within the past five years has resulted in an urgent need for resources to help in establishing appropriate facilities for the very young child. The purpose of this bibliography is to provide a compilation of such practical resources for parents and educators.

In selecting items for inclusion, an attempt was made to provide a variety of types of materials that might be helpful for planners of diverse kinds of infant programs. Because of the relatively recent advent of infant and parenting programs, information about many fine programs is not yet in print. The programs and resources that follow are a representative sample of those currently available.

DESCRIPTIONS OF INFANT PROGRAMS

Anselmo, S., & J.D. Peterson. *A Manual for Caregivers of Infants and Toddlers.* Iowa City, IA: University of Iowa, Early Childhood Education Center, 1976. This publication, evolved from the Hawkeye Model Day Care Center at the University of Iowa, describes the age composition of the infant-toddler group, activities of a typical day, desired characteristics in caregivers, equipment used for daily interaction, and activity-plans found successful for use with children between one and three years of age.

Badger, E. *Mother's Training Program: Educational Intervention by Mothers of Disadvantaged Infants.* 1968. ERIC Document Reproduction Service No. ED 043 378. This report describes how mothers in a self-help program for so-called culturally disadvantaged children were recruited and how educational materials were selected. Weekly meetings with the mothers emphasized verbal interaction and involvement with their leader.

Day, M.C., & R.K. Parker, Eds. *Preschool in Action: Exploring Early Childhood Programs.* Boston, MA: Allyn & Bacon, 1977. This second edition contains descriptions of a number of the best known infant programs. Included are Levenstein's Mother and Child Home Program,

Karnes' and Zehrbach's project on Educational Intervention at Home, the Florida Parent Education Infant and Toddler Programs, as described by Gordon, Guinagh and Jester, and Lally's and Honig's Development Research Programs.

Johnson, D., et al. *The Houston Parent Child Development Center: A Parent Education Program for Mexican-American Families.* Houston, TX: University of Houston, Parent Child Development Center, 1975. Describes a home intervention program for Mexican-American children from birth to 2 years of age.

Keister, M.E. *The Good Life for Infants and Toddlers.* Washington, DC: National Association for the Education of Young Children, 1970. Describes the operation of a demonstration infant care center sponsored by the Institute for Child and Family Development at the University of North Carolina. The bulletin states well a rationale for providing infant care, but does not include specifics on how to establish a center.

Lambie, D.; J. Bono; & D. Weikart. *The Ypsilanti-Carnegie Infant Education Project.* Ypsilanti, MI: High Scope Educational Research Foundation, 1973. The principal purpose of the project was to assist mothers who wanted support in rearing their children. The project sought to intervene with economically disadvantaged children at very early stages in their development.

Mother's Training Program. Urbana, IL: Model Programs, Childhood Education, 1970. ERIC Document Reproduction Service No. 045 781. Prepared for the White House Conference on Children held in December 1970, this booklet describes a tutorial program involving both mother and child. It seeks to demonstrate that mothers in economically deprived areas can be trained to provide their children with a more stimulating home environment and preschool skills.

Oakland University Infant/Parent Program. Rochester, MI: Oakland University, 1976. This program was established to serve infants, parents, caregivers and early childhood students. The booklet describes parent sessions, sample activities and evaluations.

O'Farrell, B. *A Study in Child Care: "They Understand."* Day Care Programs Reprint Series, 1970. ERIC Document Reproduction Service No. ED 051 892. This day care center, serving 100 children (birth to 3 years old), admits only one child per family. The child must be the first or second in a family where both parents have a high school education or less and earn less than $5,000 per year. Many of the women selected for the program are unmarried high school students. Information is provided concerning transportation, health, food, policymaking, staff organization, volunteers and uses of resources.

Ulrich, R.E.; S.E. Louisell; & M. Wolfe. "The Learning Village: A Behavioral Approach to Early Education." *Education Technology* 2 (1971): 32-45. Describes in detail a private day care facility, Learning Village, which enrolled children 2 months and older from a wide range of cultural and economic backgrounds.

II. INFANT CURRICULA

Badger, E. *Activities for Infant Stimulation or Mother-Infant Games.* 1970 ERIC Document Reproduction Service No. ED 046 510. Offers specific suggestions for mother-infant activities, sequenced according to developmental levels. The activities, which foster the physical and mental development of the infant and the social-emotional relationship between mother and infant, are intended for use by professionals, paraprofessionals and mother-teacher aides who work with infants in day care and home-bound programs. Lists toys and other suitable materials.

_____. *Infant and Toddler Learning Programs.* Paoli, PA: Instructo/McGraw Hill, 1971. Describes curriculum and materials for children from birth to 36 months. Produced in a kit, the curriculum stresses sensory motor, language and cognitive development activities.

Furfey, P.H. *Education of Children Aged One to Three: A Curriculum Manual.* Washington, DC: Catholic University of America, 1972. This curriculum guide resulted from the Infant Education Research Project. Sections are devoted to record-keeping, curriculum areas, case studies and available materials. The section on curriculum contains extensive activities in the areas of sensory skills, motor skills, trips, music, art, games and dramatic play, puzzles, numbers, books, sorting and science.

Honig, A.S., & R. Lally. "How Good Is Your Infant Program? Use an Observational Method to Find Out." *Child Care Quarterly* 4 (1975): 194-207. Honig and Lally explain how their three checklists, "Assessing the Behavior of Caregivers" (ABC) can be used to evaluate and improve the quality of day care given to infants. (Also see other articles in this Special Journal issue on day care.)

Koontz, C. *Koontz Child Development Program: Training Activities for the First 48 Months.* Los Angeles: Western Psychological Services, 1974. This program provides individualized activities for children from 1 to 48 months. It includes gross motor, fine motor, social and language activities.

Levenstein, P. *Toy Demonstrator's Visit Handbook.* Freeport, NY: Family Service Association of Nassau County, 1969. Gives activities and strategies used by the home visitor in the Mother and Child Home Program (See Day and Parker, *Preschool in Action: Exploring Early Childhood Progams.*) This handbook could be helpful both for developers of home-based programs, or for caregivers in a day care setting.

_____. *Verbal Interaction Project: Mother-Child Home Program Manual for Replication of the Mother-Child Home Program.* Freeport, NY: Family Services Association of Nassau County, Demonstration Center, 1973. Another resource for caregivers based on Levenstein's infant project. Provides the necessary information to establish a similar home-based infant program.

Levy, J. *The Baby Exercise Book.* New York: Pantheon Books, 1973. Levy, a French kinesiotherapist, demonstrates techniques and movements mothers may use to help their babies develop alertness through movement. Levy proposes that exercise in the child's daily routine will guide the development of coordination, prevent deformity and poor posture, promote alertness and self-reliance, and relieve anxieties.

Prudden, S., & J. Sussman. *Creative Fitness for Baby and Child.* New York: William Morrow, 1972. Exercises in this book are specifically geared to different age groups from 3 months to 4 years old. Included are 70 photographs.

Saunders, M. *ABCs of Learning in Infancy.* Greensboro, NC: The University of North Carolina, Institute for Child and Family Development, 1971. Shows how all the things a baby does and all that happens to him afford opportunities for learning. Suggests ways for adults to help infants learn and enjoy the learning experience.

Saunders, M., & M.E. Keister. *Curriculum for the Infant and Toddler.* Greensboro, NC: The University of North Carolina, Institute for Child and Family Development, 1971. Describes a slide presentation and script that explain the Infant Care Project Curriculum. A copy of the script and 118 slides are included. The presentation is useful for developing a day care curriculum for infants and for training day care workers.

Segner, L., & C. Patterson. *Ways To Help Babies Grow and Learn: Activities for Infant Education.* Denver, CO: University of Colorado Medical Center, John F. Kennedy Child Development Center, 1970. Presents guidelines for working with children under 3, through drawings, photographs and simple statements. Gives curriculum suggestions for toys, games and music.

Shearer, D., et al. *The Portage Guide to Early Education.* Portage, WI: Cooperative Educational Service, 1974. An experimental edition of a checklist of behaviors and card file of curriculum activities from birth to 5 years.

Sparling, J., et al. *Carolina Infant Curriculum.* Chapel Hill, NC: Frank Porter Graham Child Development Center, 1974. Contains an infant development chart of 47 skills, with a suggested activity for gaining each skill. Includes photographs.

Taylor, A., & M. Ryan. *Daily Programming for Infants in Day Care.* Cambridge, MA: Educational Day Care Services Association, 1973. Helps caretakers plan age-appropriate activities and gives suggestions for arranging learning areas.

Tronick, E., & P.M. Greenfield. *Infant Curriculum: The Bromley-Heath Guide to the Care of Infants in Groups.* New York: Media Projects, 1973. This curriculum covers all components of care and individualized experiences for infants in a group care setting. Provides activities for the individual infant, infant-to-infant, and infant-to-adult interactions. The loose-leaf format enhances its usefulness to caregivers.

Wagner, B. *Planning for Infants in Day Care. Developmental Activities for Infants.* Lubbock, TX: Texas Tech University, Child and Parent Services, 1976. A set of color-coded activity cards matches a developmental objectives chart. Objectives are divided into six categories: body control, object concept, space/time relationships, causality, language, and discovery of selfhood.

III. DAY CARE AND CHILD CARE PROGRAMS

Arnote, T. *Learning and Teaching in a Center for the Care of Infants and Toddlers.* Greensboro, NC: University of North Carolina, 1969. Designed for directors and professional staff who recruit and train staff for group-care settings for infants and toddlers. Topics covered are: interviewing, orientation, on-the-job training, staff meetings, and development of staff goals. Includes sample records.

Auerbach, S. *Child Care: A Comprehensive Guide.* New York: Behavorial Publications, 1975. This practical guide is composed of four volumes, the first being *Rationale for Child Care: Programs Vs. Politics.*

Beker, J; S.M. Hested; F.M. Gitleson; P. Kaminstein; & L.S. Finkel. *Critical Incidents in Child Care: A Case Book.* New York: Behavioral Publications, 1972. Intended as a resource for educators who are training child care workers, this publication describes situations common to day care centers. Each incident, designed to serve as a discussion setting for trainees, requires that a decision be made as to how the situation should be handled.

Breitbart, V. *The Day Care Book: How, What, and Why of Rational Day Care.* New York: Knopf, 1974. This practical view of child care is enlivened by consideration of such contemporary issues as feminism, communalism, and community activism.

Day Care and Child Development Council of America. *Alternatives in Quality Child Care: A Guide for Thinking and Planning.* New York: Behavioral Publications, 1972. Answers questions organizers of day care services might have regarding characteristics of a meaningful day care program. Chapter topics include: self-awareness, family and environment, parent and community involvement, infant care, exceptional child day care, and case studies. Information for the book was compiled under an OEO (Office of Economic Opportunity) grant.

Deneberg, V. *Education of the Infant and Young Child.* New York: Academic Press, 1970. Discusses the kinds of experiences caretakers should provide for infants who spend time in day care centers.

Dittman, L. *Children in Day Care with Focus on Health.* Washington, DC: U.S. Government Printing Office, 1967 (Bureau Publication No. 444). Deals with many aspects of child life. Includes an excellent chapter on "The Infant and Toddler."

_____. *The Infants We Care For.* Washington, DC: National Association for the Education of Young Children, 1973. Topics include: goals for the infants and family, working with a family, toddlers and their parents, practical points in operating a center or home-based program for infants, selection and training of staff, evaluation of programs, and directions for the future.

Elardo, R., & B. Pagan. *Perspectives on Infant Day Care.* Orangeburg, SC: Southern Association for Children Under Six, 1972. Contains a series of papers on infant day care, from proceedings of the first annual SACUS workshop on infant day care held in Little Rock, Arkansas, in June 1971. An important element is the Appendix, "Developmental Objectives for Infants and Toddlers."

Evans, E.B., & G.E. Saia. *Day Care for Infants: The Case for Infant Day Care and a Practical Guide.* Boston: Beacon Press, 1973. Presents a comprehensive, practical guide for starting and operating a day care center for children under 3. Included in Part I are a statement in support of infant day care, a brief study of day care abroad and a short review of American infant day care. Part II deals with the practical aspects of infant day care and continuing operation. The appendices include such topics as state licensing agencies, suggested classroom supplies, sample budgets, and forms for applications and personnel evaluations.

Evans, E.B.; G.E. Saia; & E.A. Evans. *Designing a Day Care Center.* Boston: Beacon Press, 1974. These guidelines for the physical design of a day care center for infants and toddlers suggest floor plans for the indoor environment that offer alternatives to meet the needs of different

kinds of programs. A major portion of the book is devoted to plans and instructions for constructing equipment for a center.

Evans, E.B.; B. Shub; & M. Weinstein. *Day Care: How To Plan, Develop, and Operate a Day Care Center.* Boston: Beacon Press, 1971. Seeks to help the layman or professional plan a day care program for young children. Discussing many concerns of day care, from small parent cooperatives to large agency projects, this practical resource includes specific ideas for forums, as well as the general information needed to begin a day care center.

German, B. *Choosing a Child Care Center?* Austin, TX: Texas Department of Community Affairs, Office of Early Childhood Development, 1973. Designed to assist parents in informing themselves about the characteristics of a good day care center, this booklet includes descriptions of an appropriate environment, as well as desirable teacher qualities, and a checklist that parents may use to evaluate child centers.

Haith, M.M. *Day Care and Intervention Programs for Infants.* Atlanta, GA: Avator Press, 1972. Discusses programs for children under 2. Describes different curriculum approaches, parent involvement, home intervention, evaluation, and other concerns of planners.

Hirshen, S., & J. Ouye. *The Infant Care Center.* Washington, DC: Day Care and Child Development Council of America, 1973. Stresses the physical environment of the infant care center. Includes floor plans.

Hoffman, D.B., et al. *Parent Participation in Preschool Day Care.* 1971. ERIC Document Reproduction Service No. ED 054 863. Expresses a strong concern to establish continuity between the home and the center through the parents' involvement in the child's educational activities in the home and at the center. A comprehensive reference list and four appendices supplement the main work.

Honig, A., & R. Lally. *Infant Caregiving: A Design for Training.* New York: Media Projects, 1973 (available through the Day Care and Child Development Council of America, Washington, D.C.). As the title suggests, this publication is to be used as a resource for training infant caregivers. It stresses aspects of child development that caregivers need to understand when working with infants and toddlers.

Huntington, D., & S. Provence, eds. *Serving Infants.* Washington, DC: U.S. Government Printing Office, 1971. The second of a series of Child Development/Day Care manuals. Gives practical suggestions for program planning, equipment and supplies, as well as activities for balanced development.

Keister, M.E. *Beginning with Infants.* Greensboro, NC: The University of North Carolina, Institute for Child and Family Development, 1972. An annotated bibliography of materials useful for those working in an infant care program, including materials for trainers and trainees, and audiovisual resources.

_____. *Hidden Treasure: Parents Search for Quality in Infant Toddler Care.* Greensboro, NC: The University of North Carolina, Institute for Child and Family Development, 1972. Describes thirteen essential qualities in out-of-home programs for infants and toddlers. An optimal color slide set accompanies the booklet.

Lally, J.R.; A.S. Honig; & B.M. Caldwell. "Training Paraprofessionals for Work with Infants and Toddlers." *Young Children* 28, 3 (Feb. 1973): 173-81. Stressing that selection and training of infant and toddler paraprofessional caregivers are the keys to successful programs, the authors explain the methods of selection of paraprofessional workers used by Sprigle's "Learning to Learn" School and the Syracuse University Children's Center. They also discuss techniques, possible problems and areas of training.

Maternal and Child Health Service. *Nutrition and Feeding of Infants and Children Under Three in Group Day Care.* Washington, DC: Day Care and Child Development Council of America, 1971. All aspects of infant and toddler nutrition in a day care setting are included in this pamphlet.

Mazyck, A.C. *Orientation and Planned Experiences for Day-Home Mothers in Training.* Greensboro, NC: The University of North Carolina, Institute for Child and Family Development, 1971. Provides information for short-term training for mothers who operate day care homes for children under 3.

McCord, I. *Child Care Handbook.* Washington, DC: American Home Economics Association, 1975. This practical manual deals not only with child care licensing standards, organization and management, but also with films on child care, children's records and recipes for inexpensive art materials.

Nutrition and Feeding of Infants and Children Under Three in Group Day Care. Rockville, MD: U.S. Department of Health, Education, and Welfare, Health Services and Mental Health Administration, Maternal and Child Health Service, 1971. Includes sections on nutrition and feeding, safe food preparation, furniture and equipment for feeding, etc. Day care workers should find the sample food-plans and suggested daily meal-plans very helpful.

Palmer, M.W., ed. *Day Care Aides: A Guide for In-Service Training.* New York: National Federation of Settlements and Neighborhood Centers, 1968. Contains useful ideas for those responsible for training aides. The Appendix lists games, books, records, finger plays, and play characteristics of ages 1 to 3.

Parker, R.K., & J. Knitzer. *Daycare and Preschool Services: Trends and Issues.* Atlanta, GA: Avator Press, 1972. This paper served as a source of background information for the 1970 White House Conference on Children and Youth. It states as its purposes: a) to examine and communicate knowledge regarding existing child care and preschool services; b) to summarize some of the major pragmatic and theoretical programs that will have to be met in the 1970s; and c) to pose some critical options for policy decisions.

Prescott, E., & E. Jones. *The "Politics" of Day Care.* Vol. 1. Washington, DC: National Association for the Education of Young Children, 1972. Gives information for communities that wish to establish group day care services. Discusses various problems connected with establishing centers, including regulations established by licensing agencies.

_____ &_____. *Day Care as a Child Rearing Environment.* Vol. 2. Washington, DC: National Association for the Education of Young Children, 1972. In this second volume on day care services, the authors discuss practical components of operating a day care center.

Silverstone, N., ed. *Programs for Infants and Young Children. Part 1: Education and Day Care.* 1970. ERIC Document Reproduction Services No. ED 047 807. Intended for use by local committees planning and organizing day care and education programs for infants and young children, this book describes types of programs currently in operation. A bibliography gives other sources of information on early childhood programs and includes film suggestions.

Steinfels, M. *Who's Minding the Children?: The History and Politics of Day Care in America.* New York: Simon & Schuster, 1973. Traces the history of day care and its relationship with current care practices. Also outlines the still unresolved political debate concerning child care and social policy concerns. The author favors parent-controlled day care centers.

Willis, A., & H. Ricciuti. *A Good Beginning for Babies: Guidelines for Group Care.* Washington, DC: National Association for the Education of Young Children, 1975. Designed for administrators who work with caregivers providing group care for infants, this book should also prove useful for new parents, in that appropriate activities for the infant's day are discussed, as well as aspects of the optimal physical environment.

IV. INFORMATION FOR PARENTS AND PARENT PROGRAMS

Aaronson, M., & J. Rosenfeld. *Baby and Other Teachers.* Washington, DC: Day Care and Child Development Council of America, 1973. Designed for Appalachian mothers, this simply written account (in cartoon format) tells of social, emotional and educational needs of babies in the early months of life. For professional persons, a research section is included.

Arnstein, H.S. *The Roots of Love: Helping Your Child to Learn to Love in the First Three Years of Life.* Indianapolis, IN: Bobbs-Merrill, 1975. Helps parents understand the importance of their early relationships with infants. Discusses concerns common to all, such as toilet training and using a pacifier.

Bert, D.K. *The Parent as Teacher.* New York: Parent's Magazine Films, Inc., 1975. One of a series of four sets of filmstrips on effective parenting, this set deals with the important role played by the parent or caregiver as the infant's and child's first teacher. Parents are taught to encourage independence as they guide the child toward self discipline.

Boston Children's Medical Center. *Pregnancy, Birth and the Newborn Baby.* New York: Delacorte Press, 1972. This guide for young parents-to-be, produced by professionals from the Boston Children's Medical Center and Health Education Department, includes information about the infant from conception through the first few months of life.

Brazelton, T.B., *Infants and Mothers.* New York: Delacorte Press, 1969. Stressing the uniqueness of every child, the author traces three different mother-infant relationships to show that variety in behavior is normal.

_____. *Toddlers and Parents, A Deeclaration of Independence.* New York: Delacorte Press, 1975. Explains how parents and other caretakers can meet the changing needs of children from 1 to 3 and guide them in building inner controls, self-awareness and learning skills.

Buckland, C.M. "Toward a Theory of Parent Education: Family Learning Centers in the Post-Industrial Society." *Family Coordinator* 21 (1972): 151-62. Presents a theoretical model for parent education based on data from the literature. Proposes hypotheses and propositions concerning the model for empirical testing.

Caldwell, B.M. *Home Teaching Activities.* Little Rock, AR: Center for Early Development, University of Arkansas, 1971. Activities for children from infancy to 3, which parents can use to aid in the development of their children.

Church, J. *Understanding Your Child from Birth to Three: A Guide to Your Child's Psychological Development.* New York: Random House, 1973. In informal style, Church stresses that children become what we expect them to be, and offers guidance to parents so that they can feel more confident in their roles in children's development.

Cole, A., et al *Recipes for Fun.* Winnetka, IL: Parents as Resources Project, 1970. Describes and illustrates home-centered learning activities for mothers to do with their preschool children. This booklet is intended for use both at home and at workshops where activities are demonstrated to parents. (Also available in Spanish language version, *Recetas para Divertirse.*)

Cole, A., et al *Workshop Procedures: A Companion Guide to Recipes for Fun.* Winnetka, IL. Parents as Resources Project, 1970. Intended to be used as a companion to *Recipes for Fun,* this guide translates those learning activities into a workshop format for training parents and others working with young children.

Dodson, F. *How To Parent.* New York: Signet Books, New American Library, 1970. Designed to help parents to understand stages in development from infancy through early childhood. Discusses mother's role in the child's development (see also *How to Father* by same author; same publisher, 1975). Books, records, toys and materials suitable for young children are listed in appendices.

Fraiberg, S.H. *The Magic Years.* New York: Scribner's, 1959. Parts 2 and 3 of Fraiberg's book describe the development of the child from birth through the third year. Because the narrative is written in a simple, non-technical style, it is appropriate for parents and caregivers.

Gordon, I.J. *Baby Learning Through Baby Play: Parent's Guide for the First Two Years.* New York: St. Martin's Press, 1970. Proposes that through planned games and play parents can greatly influence their children's later intellectual ability. The guide for the games is written in simple language and well illustrated.

_____. *The Infant Experience.* Columbus, OH: Charles E. Merrill Publishing Co., 1975. On the thesis that the parent is the first teacher, whose infant is potentially a competent learner, Gordon discusses the cognitive, physical and social development of infants and the parent's role in developing competence.

Honig, A.S. *Parent Involvement in Early Childhood Education.* Washington, DC: National Association for the Education of Young Children, 1975. Discusses programs that involve families and encourage parents to interact positively with their children. Includes a materials and idea-resource list.

Jones, S. *Good Things for Babies.* Boston: Houghton Mifflin, 1976. A catalog and sourcebook of safety and consumer advice regarding infants from birth to 2 years of age.

Lane, M.B. *Education for Parenting.* Washington, DC: National Association for the Education of Young Children, 1975. Discussing the current status of parent education and parenting

programs. Lane draws upon her experience in the Nurseries in Cross-Cultural Education (NICE) and offers insight into working successfully with parents.

Lathrop, J.C. *Infant Care.* Washington, DC: U.S. Department of Health, Education, and Welfare, U.S. Government Printing Office. 1973. This government booklet, the first edition of which was published in 1914, covers many of the basics of caring for infants and young children. It seeks to answer questions parents are likely to have about what is "normal" in an infant.

Le Shan, E.J. *Natural Parenthood.* New York: The New American Library, Inc., 1970. Le Shan, a consulting psychologist, seeks to prevent confusion in parents resulting from the many approaches to child rearing available today. Parents are encouraged to understand the developmental sequence in their children and to have self-confidence about their guidance role.

Levine, James A. *Who Will Raise the Children? New Options for Fathers (and Mothers).* New York: J. P. Lippincott Co., 1976. This pioneering book by the former director of the laboratory nursery school of Wellesley College is "about men and child care...men who deliberately choose to care for children and are successful at it." Valuable insights about changing family patterns.

O'Keefe, A. *The Home Start Program: Guidelines.* 1971. ERIC Document Reproduction Service No. ED 058 948. The Home Start objectives are: 1) to involve parents directly in the educational development of their children; 2) to help strengthen in parents their capacity for facilitating the general development of their own children; 3) to demonstrate methods of delivering comprehensive Head-Start type services to children and parents for whom a center-based program is not feasible; and 4) to determine the relative costs and benefits of center- and home-based comprehensive early childhood development programs. This guide presents all aspects of the Home Start Program.

Painter, G. *Teach Your Baby.* New York: Simon & Schuster, 1971. This comprehensive program of simple activities for parents to do with their children was planned to stimulate cognative, social and physical development. Activities are designed for every stage of development from infancy to age 4.

Rabinowitz, M. *In the Beginning: A Parent Guide of Activities and Experiences for Infants from Birth to Six Months.* Book 1. New Orleans, LA: Parent-Child Development Center, 1973. Suggestions for stimulating infants, designed for the nonreader.

Segal, M. *You Are Your Baby's First Teacher.* Fort Lauderdale, FL: Nova University, 1973. Telling parents what a baby learns in the first year of life, Segal suggests specific activities to use with the baby and provides a checklist to record activities.

Smith, L., et al. *Behavioral Prescription Guide, Manual 11C: Social, Parent-Child Home Stimulation "The Marshalltown Project."* Marshalltown, IA: Marshall-Towesheck County School System, 1973. Presents behavioral and prescriptive strategies for parents to use with infants and preschool children in the social area.

Spock, B. *Baby and Child Care.* New York: Pocket Books, 1968. A new edition of a classic handbook on child rearing. Spock, a pediatrician, deals with all aspects of baby and child care through the needs of the entire family. Includes a chapter on discipline.

V. GENERAL RESOURCES

Ames, L.B. *Child Care and Development.* New York: J.B. Lippincott Co., 1970. The associate director of the Gesell Institute of Child Development produced this comprehensive description of human development from conception to age 11. The guide includes a glossary, index, photographs and tables.

Bowlby, J. *Child Care and the Growth of Love.* Baltimore, MD: Penguin Books, 1965. A nontechnical version of the now classic "Bowlby Report" prepared for the World Health Organization and entitled *Maternal Care and Mental Health.* Emphasizes the importance of mothering and family life for the infant. This study has greatly influenced many workers in the fields of infant care, institutional care and day care.

Braga, J.D., & L. I. Braga. *Child Development and Early Childhood Education.* Chicago, IL: Model Cities-Chicago Committee on Urban Opportunity, 1973. Appropriate for undergrad-

uates and parents, this text covers each year of the child's growth, with specifics as to what might be expected from the child at each level. The appendices include information related to learning disabilities and day care.

Chandler, C.A.; R.S. Lourie; & A.D. Peters. *Early Child Care—The New Perspectives.* New York: Atherton Press, 1968. Outstanding papers dealing with development and individuality, and including such topics as the theoretical basis for programing, child care in other countries, and research projects involving infants in group care. Also provides practical help to those operating day care programs.

Dittman, L. *What We Can Learn from Infants.* Washington, DC: National Association for the Education of Young Children, 1970. A collection of papers on infant development, parent-infant relationships, and social development of the young child in our society.

Hellmuth, J., ed. *Exceptional Infant. Volume 1: The Normal Infant.* Seattle, WA: Special Child Publications, 1967. A collection of papers on infant development which deal with the examination and observation of infants in motor, affective and cognitive development and implications of private research.

Honig, Alice. *Infant Education and Stimulation (Birth to 3 years): A Bibliography.* Urbana, IL: University of Illinois, College of Education Curriculum Laboratory, 1973. Information on programs and educators who have been responsible for ideas and practices in infant stimulation and education.

Honig, A.S., & J.R. Lally. *Preparing the Child for Learning.* New York: Parents' Magazine Films, 1973. Top honors were awarded this filmstrip and cassette set at the 1973 Atlanta International Film festival. The authors demonstrate how a child learns through experiences at various growth stages, beginning with infancy.

Hoover, M.B. *How an Average Child Behaves—From Birth to Age Five.* New York: Parents' Magazine Films, 1975. This filmstrip and cassette set describes the pattern of growth, following a predictable but unique sequence for each child. It points out the behavioral characteristics young children have in common.

Kadushin, A. *Child Welfare Services: A Sourcebook.* New York: Macmillan, 1970. Discusses current informational trends regarding protective services, homemaker and day care services, foster care services, adoption services, and child-caring institutions.

Kramer, R. *The First 18 Months from Infant to Toddler.* New York: Parents' Magazine Films, 1975. A filmstrip-and-cassette set to help caretakers understand the needs, behavior and development of the infant. Presents practical, matter-of-fact advice on the care of the infant and toddler.

Kunkle, E., & G. Engstrom. *The Infant.* Milwaukee, WI: The University of Wisconsin, 1970. This brief discussion of how babies learn includes cultural influences on growth and language development.

Pizzo, P., & J. Manning. *How Babies Learn To Talk.* Washington, DC: Day Care and Child Development Council of America, 1973. Discusses language development beginning in infancy and the role of the family in developing language. Summaries of language development research are included in the appendix.

Ribble, M., M.D. *The Rights of Infants.* New York: Columbia University Press, 1967. Discusses the child's mental and emotional development, beginning with the relationship between mother and child at birth and ending with a projection about the child's mental and emotional development in later life.

Roby, P., ed. *Child Care—Who Cares?* New York: Basic Books, 1973. Articles by concerned professionals from eight nations provide insight into many topics relevant to child development programs. Included are articles covering infant care.

White, B.L. *The First Three Years of Life.* Englewood Cliffs, NJ: Prentice-Hall, 1975. The author believes that although most families seem to do well in parenting when their babies are between birth and 8 months, the period between 8 months and 3 years is the more important time. Presents parenting as a joyful experience, while stressing that the parent's primary responsibility is nurturing the child's development.

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Selected ACEI Publications

BASIC PROPOSITIONS FOR EARLY CHILDHOOD EDUCATION. Position paper written by Norma R. Law, et al for ACEI. Philosophy about programs for young children—planning and implementing. 1965. 12 pp. 25c each. 10 copies $2.00. ISBN 0-87173-047-2

BITS & PIECES—IMAGINATIVE USES FOR CHILDREN'S LEARNING. Recycling of finds, leftovers, give-aways and throwaways for creative learning in class and at home. 1967. 72 pp. $2.00 ISBN 0-87173-014-6

CHILD'S RIGHT TO QUALITY DAY CARE. Position paper by Annie L. Butler. Explores the need for day care and what's included. Discusses quality, licensing and responsibility. 8 pp. 35c each. 10 copies $3.00. ISBN 0-87173-049-9

COOKING AND EATING WITH CHILDREN—A WAY TO LEARN. Stresses the need to provide children with healthful foods and the importance of eating in a friendly climate. Recipe section: guide on child input. 1974. 48 pp. $2.50. ISBN 0-87173-053-7

CREATING WITH MATERIALS FOR WORK AND PLAY. Portfolio of twelve leaflets with practical, useful ideas for art, dance, science, drama and more. 1969. $2.00. ISBN 0-87173-053-7

A LAP TO SIT ON AND MUCH MORE—HELPS FOR DAY CARE WORKERS. A collection of articles from *Childhood Education* give guidance to paraprofessionals and directors working in day care and other early childhood programs. 1971. 96 pp. $2.00. ISBN 0-87173-025-1

NURSERY SCHOOL PORTFOLIO. The whys and wherefores of nursery school. Sixteen leaflets cover many aspects of early learning, programs, observation, evaluation, discipline, etc. 1969. $2.25. ISBN 0-87173-012-X.

NUTRITION AND INTELLECTUAL GROWTH IN CHILDREN. A look at hunger in America, how it affects children, role of the school in providing for nutrition, care in other countries, future prospects. 1969. 64 pp. $2.00. ISBN 0-87173-035-9

ON THE CONTINUITY OF DEVELOPMENT. Position paper by Ira J. Gordon. Explores continuities and discontinuities of children's development; proposes constructive synthesis; supports the family. 1976. 8 pp. 35c each. 10 copies $3.00. ISBN 0-87173-071-5

OPENING, MIXING, MATCHING. Describes how nine teachers engaged in a quest to open up curriculum, mixed age groups (0–8) and utilized the bus for learning. Minnie Berson: coordinator. 1974. 44 pp. $2.95. ISBN 0-87173-003-0

PARENTING. Guide to new thinking of a parenting concept beyond parenthood, involvement of other persons young and old, of school and community. Changing roles; single parents; child care abroad. 1973. 72 pp. $2.50. ISBN 0-87173-036-7

PLAY: CHILDREN'S BUSINESS. Leading writers defend importance of learning through play. Includes toy/play materials guide for various age levels. 1974. 56 pp. $2.95. ISBN 0-87173-005-7

PLAY IS VALID. Position paper by Lawrence K. Frank for ACEI. Supports play as the most fruitful learning in life. A look at spontaneity, trial and error, exploration. 1968. 8 pp. 35c each, 10 copies $3.00. ISBN 0-87173-057-X

SELECTING EDUCATIONAL EQUIPMENT AND MATERIALS FOR SCHOOL AND HOME. Excellent reference guide for teachers supplying classrooms for different age levels. Criteria for choosing. List of manufacturers. 1976. 112 pp. $3.50. ISBN 0-87173-010-3

THAT ALL CHILDREN MAY LEARN WE MUST LEARN—LOOKING FORWARD TO TEACHING. Collection of twenty articles from *Childhood Education;* focus on the developing child as a person, teachers as guides, programs producing healthy climates. 1971. 96 pp. $3.00. ISBN 0-87173-032-4

UNDERSTANDING AND NURTURING INFANT DEVELOPMENT. Six provocative papers from ACEI Texas Conference on Infancy offer optimistic counsel; focus on major needs of children. 1976. 72 pp. $2.75. ISBN 0-87173-073-1

These publications may be ordered directly from the ASSOCIATION FOR CHILDHOOD EDUCATION INTERNATIONAL, 3615 Wisconsin Avenue, N.W., Washington, D.C. 20016. Please include check or money order payable to ACEI for cost of publications plus 10 percent for postage and handling. Only orders over $10 may be billed. A complete publications catalog and membership information will be sent free upon request.